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Stock Exchange Investments

IN

Theory and Practice

WITH CHAPTERS ON

The Constitution and Operations of the
Bank of England

AND

The National and Local Debts of the
United Kingdom.

A COURSE OF LECTURES

BY

JOSEPH BURN,

FELLOW OF THE INSTITUTE OF ACTUARIES.

PROFESSIONAL ASSOCIATE OF THE SURVEYORS' INSTITUTION.

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PREFACE.

THESE lectures were delivered in the Hall of the Institute of Actuaries during the session 1908-9. They were primarily intended for the benefit of Students for Part II of the Institute Examinations in connection with the following subjects included in the current syllabus :

- (a) The constitution and operations of the Bank of England ; the National and Local Debts of the United Kingdom.
- (b) The principal classes of Stock Exchange Securities, and practical questions arising in connection with their purchase and sale.

I hope, however, that the information on points of practice relating to all kinds of Stock Exchange transactions will prove of value to many others besides Students of the Institute.

The requirements of the syllabus in reference to National and Local debts have necessitated the inclusion of a large amount of detail which otherwise might have been omitted, but even on these points I trust it will be found that the information given will be of some general interest.

I have endeavoured to give sufficient information to enable anyone to read the Stock Exchange and Money Market columns of the daily papers with intelligence and advantage.

It was impressed upon me when I was first asked to deliver these lectures that so far as regards investments the principal difference between Parts II and IV of the Syllabus is that the former requires the student to know how the practical work of investment is carried out, whilst the latter is more concerned with underlying principles ; in other words, the distinction is that of Kingsley's " Madam How " and " Lady Why."

I had originally hoped to be able to devote some of the lectures to explanations which would be more particularly appropriate to the requirements of Part IV of the Syllabus, but time did not permit me to do so.

I think, however, that students for that Part will find much that is useful to them in the following pages.

In many cases the present work includes much more than the time allotted enabled me to say in the lectures. This is more particularly true of the lecture on "Local Indebtedness" which has been almost entirely recast.

I desire to acknowledge the very great assistance rendered by many kind friends, and particularly by Mr. F. P. Symmons, F.I.A., of whose constant help it is impossible for me to speak too highly.

J. B.

142, HOLBORN BARS,
September, 1909.

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INTRODUCTION.

THE usual course of prefixing a short official notice to each volume of the Lectures delivered before the Institute is hardly more than a formality in the present instance, Mr. BURN being so well known to the members and a recognized authority upon the subjects dealt with in the present volume.

These subjects are of the greatest importance to students, not only to those who may be reading for Part II of the Institute Examinations, but also to those at a later stage. They have been dealt with in considerable detail and with great clearness by Mr. BURN, and the Council believe that, in their published form, the Lectures will prove of great assistance to students, both in their work of preparation and in the intelligent discharge of their official duties, and at the same time will provide a useful book of reference for the profession generally.

G. F. H.

FIRST LECTURE.

The Constitution and Operations

OF THE

Bank of England.

THE object of these lectures is to give a practical insight into the many matters which arise in connection with investments. My own experience has impressed upon me how difficult it often is to obtain sufficient information to enable one to deal efficiently with Stock Exchange transactions. It is not my intention to enter into any theoretical discussion of such subjects as currency and banking, neither shall I offer any opinion as to the respective merits of various investments.

My principal object is to supply such information as will enable those whose duties involve the carrying out of investment transactions to do so in an intelligent manner. Considerable experience and knowledge of a special kind is of course required in order to enable one to decide what is and what is not a suitable investment for any given purpose. I cannot hope in these lectures to afford much assistance in this direction; I shall assume that such decisions have already been made by those responsible for the choice of investments, and all that remains is the carrying out of the subsequent operations resulting from the purchase.

While much of the information is to be found scattered in various text-books, I have always found it difficult to discover exactly where to look for it.

It is remarkable that from whatever point of view we attempt to explain the many important matters connected

with investments we invariably find it necessary to take into account the part played by the Bank of England, and to discuss its action in certain circumstances and the consequences of such action.

The Bank of England occupies such an important position in regard to all financial operations, not merely of this country, but of the whole world, that it is impossible to obtain any practical knowledge of such operations without first understanding how this great institution has grown up, and the part it now plays in the complicated machinery of the money and investment markets.

It will therefore, I think, conduce to clearness and simplicity if we commence with a consideration of this centre of the financial world.

Many people undoubtedly imagine that the Bank of England is a Government institution, and although this is not the case, it will be seen that the intimate relationship which has existed between the Government and the Bank for over two hundred years, together with the fact that various functions undertaken by the Bank are of national importance, entitle the "Old Lady of Threadneedle Street" to every honour. The Bank is not a national institution, although in many ways it partakes of the nature of such. It has been specially exempted from the provisions of the statutes which regulate other banks, and it exists by virtue of its charter. It was the first joint stock bank ever established in England. A short sketch of its history will I think, prove both interesting and instructive. You will remember, moreover, that the syllabus for the second year examination requires a knowledge of the constitution and operations of the Bank of England. In order to understand the constitution you must know its origin and the manner in which it has been modified from time to time; and in order to appreciate the extent of its operations you must learn how it has been affected by various events during its past history.

The scheme that eventually resulted in the Bank of England was one of three projected by a Scotch gentleman named William Paterson. His first scheme was put forward in 1692, and included the suggestion that the Bank Stock of £1,000,000 should be legal tender. At the beginning of 1694 he suggested that a capital of £2,000,000 should be

issued at 7 per cent. interest, but apparently the fact that the capital stock would not be repayable at any fixed date was thought to present an insuperable obstacle. However, a little later on Mr. Paterson, not disheartened by his former failures, put forward another scheme which was soon after accepted.

The Government was then in great straits for money for the Navy, and Paterson's scheme was taken up with enthusiasm by Montague, the chief of the Whig Party, and Michael Godfrey, a distinguished Whig, who in due time became Deputy-Governor of the Bank. In spite of violent opposition from the goldsmiths and pawnbrokers and the Tory Party, the Bank received its charter of incorporation on the 27th July, 1694. The original capital of the Bank was £1,200,000, all of which was subscribed within ten days. The Bank was to lend the whole of its capital to the Government and in return was to receive (1) 8 per cent., *i.e.*, £96,000, together with £4,000 per annum for management, making a total of £100,000 per annum in all; (2) the right to issue notes to the extent of its capital; (3) the right to conduct banking business generally.

It was to have no exclusive privilege, and was to be restricted from trading in anything but bills of exchange, bullion, and forfeited pledges. The Tories also had a clause inserted prohibiting the Bank from advancing money to the Crown without authority from Parliament. For many years the Bank was necessarily a Whig institution, for it was clear that if James II ever came back the Bank would see no more interest on its loan.

It may here be mentioned that the idea of lending the whole of a bank's capital to the Government was by no means new. So long ago as 1407, when the Bank of Genoa was established, (this Bank was partially organized in 1345) the same plan had been adopted.

The great benefit resulting to the nation at large from the establishment of the Bank was soon evident, and, amongst many other things, I may mention that Government tallies, which had long been at a considerable discount (in fact as much as 40 per cent. discount) soon rose to par. I may here explain that tallies were rods of hazelwood, notched, (or taillés) and given at the Exchequer to those who paid money there upon loans. The shape of the notches indicated the amount

of the loan, which was also written on two sides of the rod. The rod was then split from end to end with a knife in such a way that each section showed the notches and had the amount written upon one side. One half was kept by the Exchequer and the other handed to the lender.

The first holder's name was written on the tally, and endorsements of transfer could be made upon it, which endorsements were entered in the Bank books. The entries in the books were simply to register the persons to whom dividends were payable. When the loan came to be repaid the holders of the tallies sent them up to the Exchequer, when they were compared with their counterparts. Tallies were abolished by an Act passed in 1783. The idea of these tallies was very similar to that of the original indenture, which, as you will remember, was one piece of paper torn in two, leaving serrated edges, so that the two parties to the deed, whenever necessary, could place the pieces of paper together and so prevent the possibility of any substitution.

In an old book I was reading the other day it was explained that the dealers in these tallies (they would now be termed the brokers), who had a large number of them and stored them in their offices, might almost have been mistaken for faggot dealers. Another curious historical fact in connection with these tallies is that eventually, after their use had been discontinued, it was thought advisable to destroy them. It was suggested that they should be taken to the Houses of Parliament, where there was a big furnace. The wood was very dry and burnt so fiercely that not only were the tallies destroyed but the Houses of Parliament also.

Mr. McLeod in his "Theory and Practice of Banking" graphically describes some of the Bank's early difficulties. "In 1696 the coinage was in a very bad state, and it was decided to carry out an extensive scheme of re-coinage. While this was in progress, the old and new coins circulated together, and all this time the Bank of England had received the degraded coin at its nominal value. Its notes were payable to bearer on demand. As soon as the new coin came out, it was bound to give full weighted coin in exchange for its notes. This really meant that for every 7 ounces it had received it was bound to give 12. Such a state of things could have but

“ one result—an immediate run upon the Bank. It was, of course, soon unable to provide sufficient coin, and on the 16th May, 1696, it was obliged to adopt a partial suspension of payments. It gave notice that it could only pay 10 per cent. on its notes once a fortnight, and as the demand continued it was unable to continue even that payment, and a short time later it was obliged to make a still further suspension by limiting payments to 3 per cent. every three months. The Bank endeavoured to retrieve its credit by making two calls on its proprietors of 20 per cent. each.”

These measures, however, did not effect their purpose, and Parliament had to take in hand the great business of restoring the credit of the Bank. Without entering into details, I may explain that this was accomplished by increasing the Bank capital and allowing subscriptions for such increase to be made in depreciated bank notes and exchequer tallies, the whole of which was received by the Government at par as a loan at 8 per cent. In that way the Government practically took over the difference. By this means the number of notes and exchequer tallies remaining in circulation was greatly decreased, and they consequently soon rose in value. The notes rose to par and the exchequer tallies, which bore interest, went to a premium.

From time to time the capital of the Bank was further increased, and in most cases such sums were lent to the Government.

The main feature of the early history of the Bank of England is its constant bargaining with the Government. On the one hand the Bank was the principal channel through which money could be readily obtained by the Government, but on the other hand the Government had the power of refusing to renew the charter.

You will have noticed that the Bank's right to issue notes was limited to the amount of its capital. In 1697 the Bank increased its capital to £2,201,171, the whole of the extra amount being at once handed over to the Government, who granted the Bank an increase in their note issue up to the amount of increased capital, and also provided that no other bank should be established or allowed by Act of Parliament within the Kingdom. This was the Statute of 1697 c. 20. It must be noted that this Act of Parliament did not prevent the establishment of private joint stock banks. I may also

mention that at this time no smaller notes than £20 were issued.

In 1707 the political situation, arising mainly out of the warlike preparations of Louis XIV, caused a serious run on the Bank. The private banks, seizing upon this opportunity, tried to precipitate matters, a prominent personage in this connection being Mr. Francis Child, who pretended to refuse the Bank of England notes. However, the Bank's friends and the Government rallied to its support, and by the aid of a further call of 20 per cent. on the shareholders all difficulties were eventually overcome. Of course, you will see that when Child refused, or pretended to refuse, to take these notes, the result would naturally be that many other people would say, "Do you know that this bank is refusing to take Bank of England notes? I think I would rather not have any; at all events I would rather have gold." A very little is enough to upset credit, and you must remember that the Bank of England notes had not at that time anything like the standing they have now.

In 1709 the Government, being in very great pecuniary difficulties, once again had recourse to the Bank of England, and in return for an advance of £400,000 allowed it to double its capital and at the same time renewed its charter until 1732. It may also be mentioned that even at that early date such a thing as "rushes" for popular issues were not unknown. The whole of the new stock, which was issued at a premium of 15 per cent., was subscribed within four hours.

The same Act of Parliament which provided for the increase of capital and extension of charter also greatly strengthened the Bank's position by providing—"That during the continuance of the said Corporation of the Governor and Company of the Bank of England it shall not be lawful for any body politic or corporate whatsoever elected or to be elected (other than the said Governor and Company of the Bank of England) or for any other persons whatsoever united, or to be united in covenants or partnerships exceeding the number of six persons in that part of Great Britain called England to borrow, owe, or take up any sum or sums of money on their bills or notes payable at demand or at any less time than six months from the borrowing thereof." (The most important provision is, of course, as you will afterwards see, that relating to the six persons.) The Bank of England

was also strictly forbidden to issue notes to a larger amount than its capital stock.

The real effect of this was that no bank was likely to remain with sufficient power to issue notes, and so essential was this power to all bankers that it was confidently expected that, as a result, the Bank of England would be left absolutely without rivals.

I may mention here that it appears to me to be very advisable, if one wishes really to understand the present constitution of the Bank of England, to follow out the various charters and Acts which have been passed and which have resulted in the Bank's present position.

In 1713 the Government again struck a bargain with the Bank, and in return for £1,200,000 which was advanced on Exchequer bills at 3 per cent., granted an extension of ten years to the charter, viz., from 1732 to 1742.

In 1716 it was found advisable to exempt the Bank in perpetuity from the provisions of the usury laws, which at that time limited interest to 5 per cent.

In 1717 the South Sea Company and the Bank of England were both invited to make tenders for the redemption of the National Debt, but as to the details of this, I will make further reference in my Lecture dealing more particularly with that subject.

In 1720, owing to the failure of the South Sea Company, the Bank was subjected to a most serious run. In the light of the present dignified attitude of the Bank, it is amusing to read of the little artifices which it occasionally found useful to adopt. At this particular time a carefully thought out, but at the same time delightfully simple, plan, avoided serious trouble. Payments were made in light silver, and even this doubtful courtesy was only extended to a few particular friends who, crowding in and occupying all the available space, were slowly served. Having been served, they simply passed out of the door, handed in their bag full of small change at another place, and passed round to the same place again, struggling at the entrance, and forcing out all the less persistent applicants, and once again receiving their small change. This they continued to do for about a day, by which time the Bank of England had been able to make suitable arrangements, and so all trouble was avoided.

The year 1722 is notable as being the first in which an

important item in the Bank returns, with which everyone is now so familiar, first appeared. I refer to the "Rest." Up to 1722 the Bank had been in the habit of dividing the whole of its profits, relying in cases of emergency on calls on its proprietors. It was now decided to establish a reserve fund out of undivided profits, such fund to be thenceforth referred to as the "rest."

In 1742 the existing charter expired. On previous occasions, as I have already intimated, the Government had granted extensions to the unexpired periods of existing charters, but, as at this time the whole term had expired, the Government was consequently able to make an exceptionally good bargain. It obtained £1,600,000 *free of interest*. The renewed charter granted was to expire in 1765. As attempts had been made to get round the previous Acts, it was again enacted that the Bank of England should have the privilege of exclusive banking. The Bank's capital now stood at £9,800,000.

I have already referred to the bad feeling which existed between the Bank of England and the private bankers, and how at one time Mr. Child tried to foster discredit of Bank of England notes by pretending to refuse them. I suppose the directors of the Bank of England had always felt somewhat annoyed at this, and waited their opportunity to retaliate. Eventually, in 1745, they concluded that their time had come. They thought out a little scheme which was really rather a clever one. They said, "We will get all Mr. Child's bank "paper that we possibly can, his deposit notes, and so on, "anything that will entitle us to the payment of actual cash; "we will collect this carefully for some time until we have a "really good amount, and then we will send round a clerk to "the bank to have them paid at once." They did this. Mr. Child, I do not know how, (I rather fancy he was a somewhat artful old gentleman) managed to get wind of the plot, and devised a counter scheme to prevent the possibility of the Bank so acting. He went to the Duchess of Marlborough, who apparently was able to draw a draft on the Bank of England for £700,000. It seems rather astonishing to me that she could do that. This draft she gave to Mr. Child, who locked it up in his safe and quietly awaited the attack. One fine morning a clerk came to the bank and began to hand out these different bills, &c., for which he required payment.

The clerk to whom he handed them picked them up and, noticing that there were a good many more to come, thought he had better see one of the partners. Accordingly he went in and saw Mr. Child who said, "Yes, that is all right; pay them out, but examine each one very carefully." As soon as the clerk had retired Mr. Child sent another clerk to the Bank of England with the draft he had received from the Duchess, instructing him to bring back £700,000 in notes. He handed these notes to the clerk at the counter, who went on paying them out one after the other, until eventually he had practically handed out the whole of the notes that had just come from the Bank of England. These were taken back and the whole difficulty was over. The Bank of England had certainly gained nothing, but Mr. Child not only prevented the Bank having their revenge, but gained very considerably over the transaction, because the Bank of England notes being at a discount and his own paper being perfectly good, he was able to arrange the transaction to his own benefit and to pocket a very large profit.

In 1759 the Bank commenced to issue £10 and £15 notes. In 1764 the charter was renewed until 1786 at the cost of a free gift of £110,000 to the Government, in addition to a cheap temporary loan.

In order to show that these constant loans of the Bank to the Government were most certainly in the nature of direct payment for renewal of the charter, I may mention that in 1781 the 3 per cents. were standing at 58, at the very time when the Bank was lending the Government £2,000,000 for three years at 3 per cent. in order to obtain an extension of its Charter to 1812.

It was about this time that, apparently by mere accident, a new practice was introduced which was eventually destined to have probably more far reaching effects than any other innovation in the whole history and practice of banking, viz., the use of cheques.

The Joint Stock Bank had, of course, ceased to exist, but a good many of the private banks had, notwithstanding the disabilities under which they suffered, continued to grow. It was suggested to some of these banks that it would be convenient to their customers if they could be allowed to have a book of blank drafts, by means of which they could draw upon their own accounts for the purpose of discharging

business debts. Of course this to us at the present day appears so simple that one wonders why it was never thought of before, but it must have been a genius who first put it into practice. It will be readily appreciated that this early form of cheque soon began to take the place of the various notes, and it was not long before all London banks, except the Bank of England, ceased to issue any notes whatsoever, although they were not legally prevented from so doing until 1844, and even at that date, had they been still issuing notes, the Bank Act would not have prevented them continuing to do so.

According to the Bank charter it was not allowable for the Bank to make any advance to the Government unless such advance was authorized by Parliament, but little by little the practice had grown up of honouring the Government's bills made payable at the Bank. The Government having certain amounts to pay simply wrote out what we should call a Treasury bill and sent it round to the Bank of England for payment. The Bank of England did not like to refuse payment, although needless to say the Government had not always a sufficient amount in its account to meet it. There was not only the annoyance of having to find money for the Government without any security, but really the Bank was not authorized to do so. Such bills, however, for many years never exceeded comparatively small amounts, and if £50,000 was reached a protest was generally made. During the American War these overdrafts sometimes amounted to as much as £350,000, and at last the Bank authorities were so urgent in their protests that Mr. Pitt promised to introduce a Bill authorizing the Bank to make such advances to a limited extent, viz., £50,000. Naturally, it was the "limited extent" which the Bank was most anxious for. The Bill was introduced about 1793, but Mr. Pitt conveniently forgot to put in the limit of £50,000, or any limit whatsoever, so that thenceforth he had a free hand in this matter and could send round bills to any amount, and he did send a good many.

In 1793 the first £5 notes were issued. I had in my hand to-day the very first one that was issued. I may say that it belongs to one of the most prominent members of this Institute, but he did not want me to mention his name here this evening, although he said that to anyone who was particularly interested in it I might do so. The one which I

held had in both corners "No. I" and the inscription read, "15th April, 1793. I promise to pay Mr. Abraham Newland "or bearer on demand the sum of £5. London, 15th day of "April, 1793. For the Governor and Company of the Bank of "England, G. Collins." Mr. Abraham Newland was the chief cashier at the time, I believe. In the other corner, "£5, entered, P. Brook." Nearly all of that is in manuscript. Many of you probably know that £5 notes were at one time generally spoken of as "Abraham Newlands."

In 1797 the Bank's supply of gold had fallen so low that it became apparent that notes could not long continue to be freely exchanged for gold. The shortage of gold resulted in many banks suspending payment. This caused great financial difficulty, and securities fell very heavily. The Government's 3 per cents. were sold at 51. To avert disaster the Government was obliged to take the inevitable step of requiring the Bank of England to suspend all cash payments until further notice. This Act was termed the "Restriction Act," and was originally intended to cease after four months, but it actually remained in force for twenty-four years, although the Bank frequently expressed anxiety to renew cash payments. In a very short time there was practically no gold in circulation, and small notes were necessary to fill up the vacancy. I will not explain at the present time why it was that the whole of the gold left the country, but I want to emphasize the fact that you could get notes but not gold, as nearly all the gold had gone. The Bank of England was authorized, therefore, to issue notes under £5, and soon afterwards the private banks were allowed similar privileges.

You must understand that gold having almost ceased to be in circulation and only Bank notes being available, the latter were seriously depreciated, gold guineas exchanging for notes at the rate of 30s. Affairs being in this state the Bank of England wished to resume payment of gold and the subject was constantly discussed. As a result of the general discussion the Bullion Commission was appointed, and produced a Report which, even to this day, is indispensable to students of currency questions.*

In 1819 an Act was passed prohibiting the Bank from making advances to the Government without the express

* I have mentioned this Report of the Bullion Commission because, in my opinion, it is a most useful paper for students of the Part IV Examination, although somewhat beyond the scope of Part II students.

authority of Parliament, thus repealing Mr. Pitt's Act of 1793 which had been so greatly abused.

In this year also the Act was passed for the resumption of cash payments, and in 1821 gold payments were resumed by the Bank of England in accordance with the terms of the Act. It is somewhat remarkable that very soon afterwards the country was disturbed by a succession of severe panics.

As I have already explained, only private banks were permitted to issue notes, and as a consequence they were the only banks in existence. Now the result of this restriction was that any little trade boom induced a number of "men of straw" to start banking, and it is unnecessary to add that the first breath of trouble blew them out of existence and encouraged panic.

In 1824 the Spanish South American Colonies were opened to British trade, and a rush of speculation ensued. It is said that £150,000,000 was invested in Mexico and South America. The price of commodities rose rapidly until about the middle of 1825, when there was a reaction and prices fell, at first slowly, and then more and more rapidly. The Bank of England, foreseeing difficulties, refused to discount trading bills as readily as before, and by so doing reduced the number of notes in circulation. By December a bad panic had developed, and sixty-three country banks came to disaster. I may say that in reading this old history one so often notices statements such as "Forty banks failed," "Sixty-three banks failed," &c., that one wonders where they all came from.

In 1826 an Act was passed prohibiting the issue of notes under £5, but the issue and re-issue of these small notes did not finally cease until 1829. It was intended to extend this Act to Scotland, but the opposition was so great that the attempt was abandoned. In Scotland, as you know, smaller notes are still in circulation, Bank of England notes being legal tender in England only.

The scandal of the small country banks was brought into prominence by the panic of 1825, and this enabled the Government to make the first breach in the bank's monopoly. In 1826 an Act was passed authorizing the establishment of banks with more than six partners, for the issue of notes. These banks, however, were not to be established within sixty-five miles of London, and were not permitted to have branches in the Metropolis. By this same Act the Bank of

England was allowed to establish branches in the provinces. These branches, which were opened at Gloucester, Swansea and Manchester,* were not at all welcomed by the country banks, who complained bitterly because they would not take their notes unless they opened an account with the Bank of England. Further, the branches transacted business at London rates, and as these were cheaper the country bankers' profits were considerably reduced.

The impetus given to banking by the 1826 Act was small at first, not more than four joint stock banks being formed up to 1830, and it was not until 1833 that it gathered weight.

In 1832, when negotiations were in progress for the renewal of the Bank charter, the Bank of England was staggered by a discovery which practically revolutionized the practice of banking in London. You will remember that I have previously referred to the London bankers introducing the use of cheques and discontinuing the issue of notes. Not much attention was paid to this at the time, although at a meeting of merchants in 1797 the conclusion was arrived at that the Bank's monopoly referred only to the issue of notes, and in 1822 the matter was referred to by prominent writers on economics. During the negotiations for the renewal of the Bank Charter, which expired in 1833, the question suddenly sprang into prominence and was submitted to the Law Officers of the Crown, who emphatically endorsed the opinion that the establishment of joint stock banks in London to carry on business in the same manner as the London bankers, was not an infringement of the Bank's monopoly. Up to that time the position had not been understood, and the Bank of England had been receiving a great deal more benefit from their charter than they were entitled to. The consternation of the Bank was naturally very great, and they attempted to have this flaw in the charter remedied, but without success. To remove all doubts a clause was inserted in the Bank Charter Act of 1833 expressly permitting such banks to be formed, provided they did not issue notes. The Act was not long in being taken advantage of, and in 1834 the London and Westminster Bank was formed, and the London Joint Stock Bank, the London and County Bank, and the Union

* At the present time the Bank of England's provincial branches are situated at Birmingham, Bristol, Hull, Leeds, Liverpool, Manchester, Newcastle, Plymouth and Portsmouth.

Bank soon followed. It must be remembered that these banks were only common law partnerships. They were not formed under the Joint Stock Bank Act of 1826, since this did not permit operations within 65 miles of London.

The Bank Charter Act of 1833, which extended the charter until 1844, contained several important provisions. By this Act the notes of the Bank of England were, for the first time, made legal tender at all places except at the Bank. The Government repaid one quarter of the debt owing to the Bank, reducing it to the figure at which it stands at the present time, viz., £11,015,100. By this Act, also, the Bank was required to make a weekly return to the Chancellor of the Exchequer, and consolidated returns were to be published by him every quarter. For the privileges conferred the Bank was to pay £120,000 per annum.

As already mentioned, the formation of joint stock banks hung fire until about 1833, but after that date made great strides, and in the spring of 1836 more than forty were formed. Many of these were speculative concerns, and towards the middle of the year it became evident that trouble was to be expected in the near future. Owing to this, and to the fact that the United States currency was being placed on a metallic basis, there was a drain of gold from the Bank, which at this time refused to discount any bills endorsed by a joint stock bank of issue. The storm burst in November, 1836, the failure of an Irish bank causing a run on the others. (A curious feature of this time was that nobody knew for certain whether Bank notes were legal tender in Ireland, legal authorities being equally divided on the point, and to avoid any risk the Irish banks kept their reserves in gold). The crisis lasted all through December, and a number of joint stock banks failed; but owing to assistance rendered by the Bank it was tided over by the early part of 1837.

In 1839 there was a somewhat violent demand on the Bank's stock of gold, and the directors had to make arrangements with some financial houses in the City by means of which gold was drawn from Paris. We have grown familiar with such operations, and they do not sound curious now, but I believe that to have been the first time such a step was taken.

It is now generally recognized that these crises were due to a number of different causes, but at that time attention

was mainly directed towards the extensive paper issues. It was only to be expected that the people who lost heavily owing to the failure of banks, whose notes they unfortunately held, should feel quite convinced that the real cause of the crises and subsequent loss was over-issue of notes. Gradually the cry of "over-issue" increased to such an extent that Government interference became inevitable, and the famous Bank Act of 1844 was eventually passed.

Any criticism of this Act must, I think, be deferred until my later Lectures, but all second-year Students should certainly make themselves familiar with the main provisions of the Act, and the effects which it has produced. There is nothing in reference to the Bank of England which is more important to Students than a thorough knowledge of the 1844 Act. If you understand that, and its effect, I think you will have little difficulty with anything else.

By the 1844 Act, Sir Robert Peel, for the first time, asserted the right of the State to regulate the whole issue of currency, and consequently to set up very stringent rules in regard to the issue of notes. Sir Robert Peel, in introducing the resolution upon which the Act was based, gave a sketch of the evils of paper currency, and outlined the method he proposed for placing it on a sound basis. He then went on to point out the evils of unlimited competition in paper issues as shown in the United States, and announced the intention of the Government to strengthen, as much as possible, the power of a single bank of issue. I want just to show you the effect. At that time (1844) Sir Robert Peel was most anxious to prove that a single bank of issue was the essential thing. In the Parliamentary debates that took place after the crisis in 1847 he said that the Act had a threefold object: firstly, to ensure the convertibility of the note, secondly, to replace sudden and severe contractions of the currency by early and gradual contractions (that is, instead of having the whole of the notes withdrawn suddenly, as often happened in a crisis, to reduce the circulation gradually so that banks might have time to make arrangements), and thirdly, to prevent difficulties which arise at all times from undue speculation by the abuse of paper currency in the form of promissory notes. He subsequently admitted as regards the second and third points that the Act had failed.

The Act is entitled "An Act to regulate the issue of

“ Bank notes and for giving the Governor and Company of the Bank of England certain privileges for a limited period.” I hope that in going through the different clauses you will not find my remarks very dull, because the clauses are really of very great importance. Clauses 1 and 2 provided “ That after the 31st August, 1844, the issue of Bank notes by the Bank of England should be kept wholly distinct from the general banking business and be conducted under the name of the Issue Department of the Bank of England.” On the same day £14,000,000 securities were to be transferred from the Banking Department to the Issue Department, of which the Government debt of £11,015,100, was to form part, and also so much of the gold as should not be required by the Banking Department. The Issue Department was to give to the Banking Department such an amount of notes as together with the notes in circulation should equal the securities and specie transferred. The securities might be reduced and afterwards increased, but not beyond the authorized amount. The Issue Department was only to issue further notes for gold.

The Banking Department remained therefore in practically the same position as an ordinary bank. If it wanted notes it paid gold to the Issue Department for them, and *vice versâ*. The Issue Department, as instituted by the Act, is purely automatic ; the more notes there are in circulation the more gold there must be in the Issue Department.

The only profit which the Bank can derive from the issue of notes is in respect of the interest on the £14,000,000 of securities allowed to be held instead of gold. Mr. Thomson Hankey, in his “ Principles of Banking ” (quoting from a work by Colonel Torrens), explains that this apparently arbitrary figure of £14,000,000 was based on the circulation as at December, 1839, when the total issue was £16,732,000, of which, however, £2,000,000 was held in reserve by the Bank. From this it was assumed that if £14,000,000 were issued against securities, the minimum amount outstanding for which the full gold equivalent would be held would be £2,732,000, and this margin was thought sufficient to ensure the convertibility of the note. There appears to be some little doubt as to this explanation, but as Mr. Thomson Hankey was a governor of the Bank of England in 1851 it would seem improbable that he should make this statement unless he was

quite certain of its truth. Mr. J. Wilson in his *Capital, Currency and Banking*, refers to the circulation being based on the average of the past thirteen months. In the *Bankers' Magazine*, 1866, it is stated that "the circulation was fixed as follows:—Long experience had shown that whenever the total note circulation of the country declined to a point approaching £22,000,000, the contraction of the currency invariably caused a strong turn of the tide. That total was therefore fixed as the safe amount at which paper secured on the Government credit might be allowed. This total was made up of £14,000,000 issued by the Bank of England and £8,000,000 by the other banks of issue."

One might at first suppose that "securing the convertibility of the note" must mean that the department was always to be in a position to pay off all its notes in gold, but with £14,000,000 of securities this is obviously impossible. I can best explain what is to be understood by the phrase by a quotation from *Gilbart on Banking*. Gilbart says: "By the phrase 'securing the convertibility of the note' it is not meant that the Issue Department held a sufficient amount of gold and silver to pay off all the notes it had issued. It is obvious that the gold and silver in hand must always be fourteen millions less than this amount, inasmuch as £14,000,000 of notes are issued against securities. By 'securing the convertibility of the note' is meant that the Issue Department of the Bank of England was in a condition to pay off any amount of notes of which payment was likely to be demanded for the purpose of exporting the gold. The Issue Department was always in a condition to meet any foreign demand for gold. This is called 'securing the convertibility of the note.'" I express no opinion as to whether I agree with that, or as to what gold reserve is required; but I want you particularly to remember that the whole of the notes are not issued against gold.

Clause 3 provides that the silver bullion held in the Issue Department shall never exceed one-fourth part of the gold bullion held. Sir Robert Peel said, "that this was a proper remedy for the inconvenience of our standard varying from other countries." He said it would be quite sufficient if you held one-fifth silver and the rest gold, as that would meet all the troubles. I only wish that all questions of bimetallism—because that is really the problem involved—could be settled

as easily as that. It did not seem to occur to him that nobody might ask for the silver although it was there. For over forty years the Issue Department has held no silver bullion whatever. When I say it has held none, I may mention that I was recently going over the various departments of the Bank of England and noticed that there was a very large amount of silver in large blocks packed up on trolleys. This, however, formed no part of the Bank's reserve, but was merely deposited there for safety, the depositors paying a fee for the convenience. In another vault there were a number of large bars also on trolleys, but these were of gold, and formed part of the reserve held against the note issue.

Clause 4 provides that all persons shall be allowed to demand notes for gold bullion at the rate of £3. 17s. 9d. per oz. of standard gold. Standard gold consists of 11/12ths pure gold and 1/12th alloy, that is, base metal. The meaning of the clause is that anybody with any quantity of gold bullion (*i.e.*, uncoined gold) can take it to the Bank of England and sell it for notes. The notes he can at once exchange for sovereigns, since by the 1833 Act the Bank of England note is to be legal tender everywhere except at the Bank, where it is, as stated on its face, payable on demand. I must explain that the actual value of gold, that is, what is termed its Mint price, is £3. 17s. 10½d. per oz., and everyone has the right to take standard gold to the Mint and have it coined, free of charge, at that rate, but as there is necessarily considerable delay, the loss of interest is greater than the margin of 1½d., and consequently in practice all gold sent to the Mint comes from the Bank of England.

Clause 5 provides that if any banker who on the 6th of May, 1844, was issuing his own bank notes, shall cease such issue, it shall be lawful for Her Majesty in Council to authorize the Governor and Company to increase the amount of securities in the Issue Department to an amount not exceeding two-thirds the amount of bank notes which the banker so ceasing to issue may have been authorized to issue; and every such Order in Council shall be published in the next succeeding *London Gazette*. This is a most important clause, and probably the majority of you know that at the present time the Bank is entitled to issue notes against securities to the amount of £18,450,000. That is the amount of securities actually held in the Issue Department against its

notes at the present time, according to the *Bankers' Magazine* for August, 1908. If all other banks should cease to issue notes, the maximum issue of the Bank of England would, I believe, be £19,754,431. Apparently in some cases the Bank of England has not availed itself of the opportunity of taking up the two-thirds of other banks' lapsed issues, and, as you will see when we refer to clause 9, there is not any very great inducement for the Bank to do so. In 1866, when the subject was comparatively new, it was explained in the *Bankers' Magazine* in this way: "At the same time a provision was made that if any of the latter establishments (banks of issue) should fail or withdraw from business, then in each such case the right of issuing notes should be forfeited: and that it should be competent for the Government, by an Order in Council, to authorize the Bank of England to supply the deficiency thus created. To effect that purpose it would not be necessary for the Bank to issue more than two-thirds of the amount of the circulation that had been forfeited, because it was taken for granted that every issuing bank would keep at least a reserve of gold equal to one-third of the notes it had issued payable on demand, and which might therefore be presented at any time; and that, consequently, the actual currency which each had put out was practically only two-thirds of its nominal amount, since to the extent of the remaining third, other currency—that is to say, gold—was withdrawn from use and locked up in their tills. Accordingly the new issues of the Bank of England in supplying the deficiencies from any such failures or withdrawals were to be limited to two-thirds."

Clause 6 enacts that a weekly return shall be made. I will deal with this, however, a little later on, as that is the portion of the Act which requires the fullest discussion.

Clauses 7 and 8 provide that no stamp duty shall be payable upon notes issued by the Bank of England, and that £180,000 per annum shall be allowed by the Bank out of the sum paid by the Government for the management of the National Debt. By the 1833 Act only £120,000 was allowed, and therefore it will be seen that in effect the release from stamp duty was paid for at the rate of £60,000 per annum.

Clause 9 provides that in event of the Bank of England issuing notes against security to an extent beyond £14,000,000

as provided for in Clause 5, it shall pay to the Government the profit on such increased issue. I may here explain that it was arranged between the Government and the Bank in 1855, when the first increase of the issue against securities was made, that the profit to be handed over to the Government was to be calculated on the following basis. It was found that over a term of years the profit from the authorized issue, after deducting expenses, averaged 2 per cent. per annum, and it was agreed that the Bank should pay this amount to the Government, less any amount that was payable to a banker as compensation for the lapsing of his issues. This sum was paid down to 1892, but at that time the interest on the Government Debt was reduced to $2\frac{3}{4}$ per cent. and in 1903 to $2\frac{1}{2}$ per cent., and at the present time the rate of profit paid to the Government, is $1\frac{1}{2}$ per cent. on all the securities over £14,000,000, viz., on £4,450,000.

Clause 10 makes it illegal for any persons to issue notes, other than those lawfully entitled to do so on the 6th of May, 1844. This, of course, absolutely prevented any repetition of the flood of worthless paper which had in the past been so fruitful a cause of trouble and disaster.

There are twenty-eight clauses of the Act, but a large number of them are not really important to us, and after the first ten clauses I think it will be found sufficient to refer only to those that are of the most importance.

SECOND LECTURE.

The Constitution and Operations

OF THE

Bank of England.

(Continued.)

AT the close of my last lecture, I intimated that it would not be necessary to go through all the clauses of the Bank Act, and I propose to confine my remarks to those clauses which deal more particularly with the Bank of England, omitting those which relate to the other existing banks of issue.

The first one to which I would direct your attention is the 24th clause, which deals with the subject of the Bank of England taking over by arrangement the note issues of certain private banks of issue. You will remember that clause 5 provided that in the event of any bank which was entitled to issue its own notes allowing that right to lapse, the Bank of England was empowered to issue notes against securities to the extent of two-thirds of the authorized issue of that bank. By clause 24 the Bank of England is similarly allowed, on the authority of an Order in Council, to take over by arrangement two-thirds of this authorized note issue, and issue notes against securities to that amount. In such a case, however, it has to allow the other bank a certain compensation. The limit of the amount of compensation is 1 per cent. on the original authorized issue. The actual amount payable within that limit is fixed at 1 per cent. of the average amount of Bank of England notes which the particular bank of issue keeps in circulation.

The Act defines the manner in which that average amount is to be ascertained. You must notice, therefore, that although the amount is 1 per cent. on the average circulation of Bank of England notes, yet it can in no case exceed 1 per cent. on the original authorized issue. The clause also provides that the Bank of England is to be allowed its expenses on the fiduciary issue, *i.e.*, the notes so issued against

securities, and by arrangement with the Government these are fixed at 1 per cent.

But having provided for those two sums, 1 per cent. to the banker on either his average circulation of Bank of England notes, or his total authorized issue, and 1 per cent. on the two-thirds which the Bank of England itself takes over, then the balance of any remaining profit is to be paid over to the Government. You see that in no case can the Bank of England make a profit out of the transaction. There is certainly no very great inducement to the Bank of England to take over any of these issues by arrangement, and not a great deal in the case of lapsed issues.

I want you to think carefully of this to see what really happens in the event of the Bank of England taking over any of these issues. First of all we will consider this example. Suppose that a bank has an authorized issue of a million and a half and by arrangement it agrees to give up that right and pass it over to the Bank of England to the extent of two-thirds. That gives the Bank of England the right to issue a million sterling of notes against securities. Suppose it is found that the average amount of Bank of England notes kept in circulation is a million and a half, then you see that the amount of compensation which the Bank of England will have to pay to the original issuing bank will be £15,000, and the amount of expense on the £1,000,000 issue taken over may be assumed to be 1 per cent., *i.e.*, £10,000. Therefore the total amount payable would be £25,000. They have taken over the right to issue £1,000,000 against securities, and supposing, as would have been the case a few years ago, the rate of interest obtainable was $2\frac{1}{2}$ per cent., the Bank of England would be getting £25,000 in interest on the million of securities against which the notes were issued, and would be actually paying out £25,000. In such a case as this there would be no profit whatever, and consequently nothing to hand over to the Government. But what is the position of the Bank of England? The Bank of England is actually issuing a million and a half of its own notes in place of the original million and a half kept in circulation by the original issuing bank.

Regarding the £1,000,000 issued against securities, I think I have already shown that there is really no possibility of any profit. But what of the other half million? The other

half a million is, of course, issued against gold, and with regard to that there is no possibility of gain. There is really a slight loss, because of the expense of printing the notes.

Now let us consider what will happen in another case. Supposing a similar bank which has an authorized issue of a million and a half keeps in circulation half a million. In such a case the compensation which would be payable by the Bank of England to that issuing bank would be £5,000. The fiduciary issue, which is the issue against securities, would be one million to the Bank of England, and the expenses attendant on that issue £10,000. The total amount, therefore, would be £15,000. Assuming the same rate of interest on the £1,000,000, viz., $2\frac{1}{2}$ per cent., the total interest would be £25,000, and the net profit £10,000, all of which would be handed over to the Government. In this case also the issuing bank has not actually obtained any profit, and the real result is an increase of half a million notes which are probably not required. We have seen that the Bank of England has taken over two-thirds of the original authorized issue of a million and a half, and up to this amount, viz., £1,000,000, notes can be issued against securities, whereas only half a million of Bank of England notes are kept in circulation by the original issuing bank, and presumably that was the amount which they kept in circulation of their own notes, so that the actual notes in circulation on that assumption is unnecessarily increased by half a million. But there is one other thing to be provided for, namely, that the proportion of gold held in the Bank of England against the notes is reduced by half a million, and increased by half a million as regards the securities. You will therefore observe that the proportion of gold, in such a case as I have given, which would be held against the notes issued, would be reduced. I express no opinion as to whether it is good or bad, but would merely call your attention to the point.

Clause 27 grants a continuation of the Bank Charter until 1855. When that date arrived, a question was asked in Parliament, and the Chancellor of the Exchequer replied that it was not the intention of the Government to take any steps in the matter. But in the 1870 Act, that is, the National Debt Act, it is distinctly provided that the charter shall continue until the whole of the National Debt is repaid. Without taking any pessimistic view with regard to that, one

may suppose that it was intended that the Bank Charter should continue in perpetuity.

Clause 28 gives several definitions, two of which are worthy of attention. An ordinary person, at least here in London, who is asked for a definition of a Bank Note, at once imagines a Bank of England note, and therefore I want you to notice the difference as indicated by the Act: "And
" be it enacted that the term 'Bank Notes' used in this
" Act shall extend and apply to all Bills or Notes for
" the payment of Money to the Bearer on demand *other*
" *than* Bills or Notes of the Governor and Company of the
" Bank of England, and that the term 'Bank of England
" Notes' shall extend and apply to the Promissory Notes of
" the Governor and Company of the Bank of England payable
" to Bearer on Demand, and that the term 'Banker' shall
" extend and apply to all Corporations, Societies, Partnerships
" and Persons and every individual person carrying on the
" Business of Banking whether by the Issue of Bank Notes or
" otherwise except only the Governor and the Company of the
" Bank of England; and that the word 'Person' used in this
" Act shall include Corporations; and that singular number in
" this Act shall include the Plural Number, and the Plural
" Number the Singular except where there is anything in the
" Context repugnant to such construction; and that the
" Masculine Gender in this act shall include the Feminine
" except where there is anything in the Context repugnant to
" such construction." I suppose that in 1844 suffragettes were unheard of, but otherwise one might almost imagine that the last part of the clause was intended as a sop to them.

There are three schedules to the Act. The first is of very great importance, and I am afraid the consideration of that must of necessity occupy some time, because it gives the form of the Bank of England weekly returns. The second schedule gives the form in which the note circulation of other banks of issue is to be published. It can be referred to in the *Bankers' Magazine*, and Part IV Students may find it advisable to look it up. The third schedule is now really of no interest, as it merely sets out a list of the banks who had previously to 1844 compounded with the Bank of England for their note issues, as already explained.

I must now return to the important subject of the Weekly Return, and, as a sample, I will call your special attention to

that published on the 15th July of this year (1908). The Weekly Return of the Bank of England is published every Thursday, and is fixed up in the courtyard about one o'clock. It is very remarkable how soon afterwards it is known practically all over London, and, at times, all over the world. Speaking from my own experience, I have myself constantly received telephonic messages with regard to certain items in that return within a very few moments after it has appeared. I hope I shall be able to explain to you that, for many reasons, the Weekly Return is of the greatest importance to a very large number of people. Before referring to it in detail, I should like to point out that the Weekly Return is the only Statement of Accounts which the Bank of England publishes, and I think you must admit that this is really very remarkable. There is no balance sheet, no revenue account, no annual report—there is nothing whatever. Every week this Return is published, and you gather what you can from it. With regard to many things which one would imagine stockholders would like to know, there is no information given whatever. As to the value of their securities, the nature of their profits, or how they are doing business, we are told nothing.

The Weekly Return is divided into two parts. The first refers to the Issue Department, and the second to the Banking Department. I will first deal with the portion of the Return that refers to the Issue Department.

ISSUE DEPARTMENT.

Notes issued	£54,666,020	Government	
		Debt	£11,015,100
		Other Securities	7,434,900
		Gold Coin and	
		Bullion	36,216,020
	<hr/>		<hr/>
	£54,666,020		£54,666,020
	<hr/>		<hr/>

On the one side we have "Notes issued £54,666,020"; on the other side is the security against which these notes are issued:—"Government Debt £11,015,100," and "Other Securities (*i.e.*, Consols, &c.) £7,434,900." These items make up the total fiduciary issue, and the final item is "Gold Coin and Bullion £36,216,020," balancing the account.

The gold coin and bullion is held in various forms. If you have the opportunity of going over the Bank you can see it stacked up in little bags in different safes, some full of American Eagles, some of French coins, and some of English coins, and so on. They are kept in that way for convenience in the event of being required for export. The bullion, or uncoined gold, is kept in square bars, or ingots. I ought to explain that although the amount of gold held in the Issue Department is really of great importance, yet it does not afford any reliable indication of the true position of the Banking Department of the Bank of England, since the gold held in the Issue Department belongs to anyone who possesses the notes, and the position of any holder with regard to the power of obtaining gold from the Bank is exactly the same as that of the Banking Department. The Banking Department is merely a customer of the Issue Department. Nearly half of the total notes issued is held in bulk in the Banking Department, the remainder, of course, being in general circulation, and there is no reason to suppose that there is any other very large accumulation of notes held in one place.

Now with regard to the second part of the weekly return.

BANKING DEPARTMENT.

Proprietors'		Government	
Capital . . .	£14,553,000	Securities . .	£15,227,299
Rest	3,394,991	Other Securities	29,111,232
Public Deposits*	5,324,526	Notes	25,196,025
Other Deposits .	47,802,939	Gold and Silver	
Seven-day and other Bills . .	67,074	Coin	1,607,974
	<hr/> £71,142,530 <hr/>		<hr/> £71,142,530 <hr/>

* Including Exchequer, Savings Banks, Commissioners of National Debt, and Dividend Accounts. 16th July, 1908.

I will refer to the separate items as I have occasion to explain them. The first is "Proprietors' Capital." This, ever since 1816, has remained at £14,553,000. The whole of that capital is issued and paid up; it is held by people all over the country, that is, ordinary stockholders. It is the largest

issue of paid up capital of any Bank in the world, but there are other banks which have a far larger nominal capital. For instance, Lloyds Bank has an authorized capital of £30,000,000, but the whole of that is not issued. £24,072,500 is the actual amount issued in shares of £50 each, but only £8 per share is paid up, making a total of £3,851,600. So that although Lloyds Bank has a far larger capital than the Bank of England, yet the actual paid up capital, being £8 on each £50 share, is very much smaller.

The dividends on the Bank of England stock are paid half-yearly, and vary, as in any other bank, according to the profits which the Bank makes. In 1891, the dividend was 11 per cent.; after that it was less, and for some years now it has been 9 per cent. The stock is a trustees' security, that is to say it is available for investments by trustees, and it is always considered as being one of the very highest class of securities. If you look at the *Daily List*, you will see that the first group, which is principally devoted to Government Securities, includes Bank of England stock.

The price has varied very considerably. In 1898 I believe it was as high as £367 per cent., whereas some time last year it was only about £255 per cent., a very considerable variation.

The next item is entitled the "Rest," to which I have already referred. The amount of the "Rest" in the Weekly Return to which I am referring is £3,394,991. It was instituted originally as a fund to equalize dividends, but now it is generally recognized to be more in the nature of a reserve fund for the purpose of meeting any possible loss, and from this fund the dividends are paid as they become due. If you follow the figures of the "Rest" as they appear each week, you will see that for the most part they steadily increase as the profits of the Bank increase. Occasionally a decrease is shown as the result of some loss, and there is a natural decrease after the dividends have been paid.

The next item is entitled Public Deposits, and under this head are included all the Government accounts. You will notice that there is a reference to a note at the foot, which says, "Including Exchequer, Savings Banks, Commissioners of National Debt, and Dividend Accounts." All of those different accounts are included under the head of "Public Deposits." The principal item is the Exchequer

account. All the revenue, as it is collected, is paid into the Exchequer account, and from that is transferred to the other accounts kept by the State. From the Exchequer account are paid the thousand and one different requirements of Government supply, such as salaries to civil servants, and army and navy payments of all kinds. Shortly before the dividends on the National Debt become due, the correct amount is transferred from the Exchequer account into the Dividend account. The full amount is always transferred every quarter, and I shall deal with what happens to those dividends which are unclaimed when I come to my lecture on the National Debt. The Commissioners for the reduction of the National Debt have an account with the Bank, and all moneys which Parliament has directed shall be applied in redemption of the debt are transferred from the Exchequer account and placed to the credit of the Commissioners. To this same account are carried all the deposits in the Post Office Savings Bank. Other accounts included under the head of Public Deposits are those of the Court of Chancery, bankrupt estates, money which has been paid into Court pending litigation, &c. The annual average amount of this account is something under 10 millions, and is highest in the first quarter of the year, when the bulk of the taxes are collected. The public deposits form about 20 per cent. of the total deposits of the Bank. The Government is by far the most important customer of the Bank of England, and the account, owing to its size and the absence of unexpected fluctuations is a very valuable one. In these circumstances it not unnaturally requires and receives very special consideration.

The next item is "Other Deposits," which amounts to £47,802,939, by far the largest figure in the liabilities of the Banking Department. This item is perhaps the most important, or at all events the most interesting, of any. The first thing to which I will draw your attention in this connection is that on this huge amount the Bank pays no interest whatever. If you open an account with the Bank of England, you will receive no interest on the balance standing to your credit. The accounts include those of many large Corporations, discount houses, wealthy merchants, trustees and various other people, but the most important of all are the balances deposited by other banks.

This is partly due to the fact that the operations of the Bankers' Clearing House are worked through the Bank of England. Each clearing banker (that is, a banker who settles his accounts with other bankers by means of the Bankers' Clearing House) has an account with the Bank, and the amounts which he has to pay or receive from the other members of the Clearing House are settled by a transfer from one account to another. In addition to this, the bankers keep their *reserves* with the Bank of England, that is to say, the amounts that they require to meet any sudden and unexpectedly large withdrawals. In case of such a demand they could immediately withdraw the necessary sum.

No doubt you will think this a very curious arrangement, that other banks whose business depends on obtaining the largest possible interest on their money, should keep a large amount at the Bank of England without getting any interest on it. The practice originated with the private banks, and that it is an old-established custom may be seen by the following extract from the evidence of Mr. George Car Glyn before the Bank Committee of 1832 :—"The London banks in order to
 " be able to meet their engagements usually keep a large
 " deposit, nearly equal to perhaps half of what they hold in
 " reserve, in the Bank of England; a portion of their
 " current funds they necessarily hold at home in Bank paper,
 " and a small amount in gold. Their deposit in the Bank
 " they consider as so many notes in their drawer, liable to be
 " called out by the daily fluctuations in the accounts of their
 " customers. The balances in their hands, often very large,
 " are frequently withdrawn without notice; hence their
 " intercourse is almost hourly with the Bank of England,
 " from which they receive every facility."

You will notice from this that all friction between the private banks and the Bank of England had by this time passed away. Full details were formerly given, in the Returns ordered to be printed by the House of Commons, as to the amounts of bankers' balances, but since 1877 this item has been omitted. At that time the bankers' balances were about one half of the other deposits, and it is generally believed that the proportion has since appreciably increased. Although I have said that no interest is ever paid on deposits, I may mention that twice, for comparatively short periods, the Bank of England has paid interest. For two or three

years at the end of the 17th century it paid interest on these deposits, and in 1834, 2 per cent. was allowed to the East India Company as an inducement to them to keep their very large account at the Bank of England.

At different times the suggestion has been put forward that a rate should be allowed on deposits, in order to enable the Bank to increase its gold reserve. It finds, however, that it suits its purpose better not to enter into competition with the other banks in this direction.

The next item is "Seven-day and other Bills," £67,074, the last on this side of the account. These are bills of exchange drawn by the Bank as a convenient means of transferring money from one part of the Kingdom to another; anyone can obtain them in amounts from £10 to £1,000. They are payable at the branches or the principal office of the Bank of England on their due dates, and are not subject to days of grace. The following is an example of the form:—

BANK OF ENGLAND POST BILL.

No.....

LONDON, *January 1, 1903.*

At seven days' sight I promise to pay this my Sola Bill of Exchange to Samuel Johnson, or order, one hundred pounds sterling, value received of Thomas Robinson.

For the Governor and Company
of the Bank of England,

£ One Hundred.

A..... B.....

The Seven-day bills owe their origin to the enormous number of robberies of the mails by highwaymen; they were made payable at seven days' sight, "So that in case of the "mail being robbed, the proprietor may have time to give "notice."

I now come to the Credit side of the account in which the first item is "Government Securities," £15,227,299. These include any of the securities which are issued or guaranteed by the British Government, such as Consols, Treasury Bills, Irish Land Stock, and so on. They represent a portion of the Bank's investments. In addition there are included the securities which have been given for temporary advances required by the Government. These temporary advances are made in two forms. One is "deficiency advances," and the other "advances on ways and means." Until 1866, the procedure in connection with deficiency

advances was a little different from the present form, and they were known as deficiency bills. The authority for the deficiency advances is an Act of 1866, which directs the Commissioners for the Treasury at the end of each quarter to take an account of the income and expenditure for the quarter, including the dividends to be paid on the 5th of the month next succeeding. If the income shows a deficiency, the Commissioners are empowered to certify the same, and to authorize the Bank of England to advance the amount necessary to cover such deficiency. The advances must be repaid out of the growing produce of the Consolidated Fund within the quarter in which they are borrowed. Advances on ways and means have to be authorized by the special Act granting supplies, usually the Appropriation Act. The authorization limits the rate of interest, and enacts that the money must be repaid in the *next succeeding quarter* to that in which it was borrowed. You will thus see that, with these very strict provisions, there is now no possibility of the Bank of England suffering similar inconvenience to that caused by Mr. Pitt at the end of the 18th century.

The next item is "Other Securities," £29,111,232. This is a very important item, embracing the remainder of the permanent investments of the Bank, the temporary loans which have been advanced by the Bank on securities, and the bills discounted. The Parliamentary Returns, to which I have already referred, formerly gave particulars of the amounts of these items, but they have not been stated separately since 1875. I find that in that year the proportion of the permanent investments included in the other securities was 60 per cent. of the total, the temporary advances being 17 per cent., and the bills discounted 23 per cent. The Parliamentary Returns say nothing about these items now, so that we can merely guess at their proportion. Mr. R. Inglis Palgrave states that as from various causes the supply of bills in the market is smaller in proportion now than in 1875, and as competition for them is also keener, it may be assumed that the proportion of bills discounted to the total "other securities" has decreased.

The last two items in the returns may be taken together. They are "Notes," £25,196,025, and "Gold and Silver Coin," £1,607,974. These constitute the stock of cash which the Bank keeps against the Deposits which are payable on demand. These notes are not to be confused with those

in the Issue Department which are liabilities, whereas the notes held in the Banking Department are money just the same as if they were held by any other bank. The notes can be paid into the Issue Department and gold obtained for them at once.*

The liabilities against which the cash in the Banking Department is held are the public deposits, other deposits, and the seven-day and other bills. The general proportion of cash to liabilities is about 45 per cent. In the panics of the years 1847, 1857 and 1866, it fell to 12 per cent., 7 per cent. and 3 per cent. respectively; but, on the other hand, in 1894 and 1895 it averaged over 62 per cent. It is this proportion which is more keenly watched than anything else in the return, and its variations are the index of future changes in the Bank Rate. None of the other banks keep nearly so large a reserve as 45 per cent. About 16 per cent. would probably be a good average, and would include the deposits with the Bank of England.

The question at once presents itself, why should the Bank of England keep a reserve which is proportionately so much larger than that of any other bank? Sir Robert Peel, when the resolution for the Bank Act of 1844 was introduced, said, "With respect to the banking business of the Bank, I propose that it should be governed on precisely the same principles as would regulate any other body dealing with 'Bank of England Notes.'" By this he meant any bank which did not issue its own notes.

As to the reason why the Bank of England keeps this very large reserve, one point to remember is that the other banks keep the greater part of their reserve with the Bank of England. In the event of any sudden demand for money—not a general panic, but an ordinary increased demand—they at once draw on the Bank of England. The other banks, therefore, have something to fall back upon; the Bank of England, however, has not this advantage, it keeps its own reserve, and cannot expect any assistance from other banks. Hence it is said to hold the ultimate gold reserve of the country. It is more liable to sudden and unexpected demands than any other bank because it is the

* The total amount of notes issued, less those held by the Banking Department, represents the total amount held by the Public, and is generally referred to as the "Active Circulation."

only one from which a large supply of gold can immediately be obtained.

In order to make this matter a little clearer, I think I cannot do better than quote from Mr. R. Inglis Palgrave's admirable work, "The Bank Rate and the Money Market." In dealing with this subject he refers to the correspondence which took place between Mr. H. H. Gibbs (now Lord Aldenham) and Professor B. Price, which was published in an appendix in the Professor's work, "Chapters on Practical Political Economy." Lord Aldenham was at that time a Director of the Bank of England, and his opinion is certainly worthy of attention:—"The correspondence at the point "alluded to turns first on the question whether the custody "of such large sums as the bankers keep on their accounts "at the Bank of England may not cause some difficulty or "even danger to the Bank. Lord Aldenham in referring to "this, and to the fact that the bankers' account is really an "extremely easy one to arrange for, commences by remarking "that 'next to the Government account, the account of the "collective bankers is the most certain and the most "intelligible. We know of the bankers, better than of any "account in our books, what is the minimum balance "wherewith they can live. They must have x on their "account, (a quantity unknown to all but us) and $x-y$ "therefore never appears. But if $x+y$ is seen, then we "know that y must remain untouched and uninvested; "must in fact, form an addition to our reserve; x is ours for "profit if we like to use it, but y is ours only for safe "custody.'" You see that the x and y referred to are those two portions of the banks' reserves which are kept at the Bank of England. You will find it most useful to understand Lord Aldenham's remarks thoroughly, but before giving you any explanation, I think it will be advisable to explain more fully what the Clearing House is.

The Clearing House is an admirable example of the natural growth of an institution to meet the necessities of business as they made themselves felt. It is said that it originated in a perfectly spontaneous way by informal meetings of the clerks entrusted with the duty of carrying round cheques, drafts, and other credit documents passed through the banks they represented. They met and exchanged their cheques, &c., and took note of their differences, and so each was saved

the trouble of going round to all the others, and the differences only were settled in cash.

What is now known as the Clearing House is an association of twenty-seven London bankers, including the Bank of England, each of which has its representatives at the Clearing House. Each bank sends into the Clearing House all the cheques, bills, &c., it has received which are payable by other members. These are handed round to the payee banks, and a list is kept by each of its debits and credits against all the others. Then, three times a day, a balance is struck after time being allowed for the several banks to decide whether they will honour the cheques or drafts against them.

The balance sheet then drawn up for any bank shows on the left side the balance due to that particular bank by each of the others, the "debtors," and on the right hand side the balances due by the bank to its "creditors," the list of the twenty-seven banks in alphabetical order, including also the Clearing House, being printed down the middle of the sheet. All the balances and the totals are then mutually agreed, and certified by the inspectors, and warrants for settling the balances by transfers in the respective accounts with the Bank of England are exchanged.

There are two clearings daily for London banks, in the morning and afternoon, and one at midday for the country bankers. The system has been copied all over the Kingdom, and clearing arrangements are in constant use in all the large business centres.

The Clearing House is a most valuable institution by means of which the passing backwards and forwards of enormous amounts of money is avoided; in fact, the economy which results therefrom is one of the most wonderful features in the whole of the banking system of to-day. In order to elucidate its working further, let us suppose that Mr. Brown draws a cheque on bank A, payable to Mr. Smith. Now Mr. Smith merely pays this cheque into his own account in bank B, an everyday transaction. Also suppose that on the same day Mr. Robinson draws a cheque on bank B, payable to Mr. Jones, who, in a similar manner to Mr. Smith, pays it into his account at bank A. Both of these banks, A and B, are members of the Clearing House, and, therefore, they both have deposits in the Bank of England. When these cheques

come to be cleared, what happens? The Clearing House clerks transfer the difference between the two cheques from the account of one bank to that of the other, but the deposits are still left in the Bank of England, untouched.

If you think the matter out, you will recognize that although there are, in the course of a single day, many thousands of cheques and bills, representing millions of money, passing through the Clearing House, yet it is only necessary for each bank to deal with its net differences. But, remember, each bank keeps an account at the Bank of England. The settlement of these differences, therefore, merely necessitates certain book entries being made there, whilst the total of the balances kept for Clearing House purposes remains untouched. That such an enormous and varied number of monetary transactions should be so easily conducted by means of the money deposited in the Bank of England is astonishing, but what is still more surprising is that the Bank of England should be able all the time to make use of that money without any danger or risk.

We can now more easily explain Lord Aldenham's remarks. What he pointed out was that the quantity x held in the "other deposits" for the purpose of its Clearing House arrangement could be safely used by the Bank of England if it so desired, but in addition to x there was the quantity y which represented the balances held by the banks in case of emergency, and the treatment of this quantity required much more careful consideration.

The Bank of England itself makes use of the Clearing House, but in quite a different manner from the other banks. As all the Clearing Banks keep accounts with the Bank of England, all cheques drawn by anybody on the Bank of England are paid into the Clearing Banks' account at the Bank of England, and do not pass through the Clearing House at all. They are simply paid straight away into their accounts. The cheques drawn on the Clearing Banks in favour of the Bank of England are cleared in the ordinary way in the Clearing House. Thus you will see that in the case of the Bank of England there is no question of differences possible, all the items being on the creditor side of the account.

I must not leave this part of the subject without indicating one other reason why it is necessary for the Bank

of England to keep larger reserves than other banks. Although the Issue Department works automatically, it still exercises a powerful effect on the Banking Department. We have seen that the Bank holds the ultimate stock of gold, all the supplies outside being fully engaged.

Let us suppose gold is wanted for export. How is it to be obtained? By taking Bank of England notes to the Issue Department and obtaining gold for them. But how are the notes obtained? By the customer (in most cases a banker) withdrawing them from the Banking Department. You will therefore appreciate that when gold is wanted for export it really comes from the Banking Department, although actually drawn from the Issue Department. Thus, the export of gold acts directly on the Bank's reserve, and as the supply of gold in the Bank is the most readily accessible in the world, it is open to attack from all parts.

Before going further, I shall have to give a slight explanation in regard to "call money," which is a most important item. You must understand, in the first place, that the greater part of the trade of the world is carried on, not by actual money, but by bills payable at certain dates after their acceptance. Enormous economy of currency results from the use of these bills. One man deals with another, and is paid by means of a bill payable so many days afterwards, sixty or ninety days, as the case may be. As soon as he has this bill, what does he do with it? He does not lock it up until it is time to draw the money, he cannot do that because he requires the cash for carrying on his business. Directly the bill is accepted, it being then a negotiable instrument, he takes it somewhere to get it discounted, and uses the money so obtained. He may get it discounted at his bank or at one of the discount houses, or perhaps by one of the bill brokers, men who specialize in that particular class of business.

This leads up to my main point. How do these brokers carry on their business? A broker starts business with a capital of £50,000, say. With part of his capital he opens accounts with as many of the clearing and Scotch banks as will oblige him. He then buys from the London agencies of the foreign banks and merchant banking firms parcels of bills which they have for disposal. In the aggregate the broker may hold bills for any amount from one to ten millions sterling. The cheques which he draws for the

purchase of these bills must be met before 4 o'clock with the money which he is able to borrow at call or short notice from his several bankers and banking friends. He secures his profit from (1) the difference between the discount rate and the rate of interest paid for the loans, (2) the difference in price at which he buys or sells bills.

You must remember that there is always an enormous amount of money which, for various reasons, is not available for a long investment, but is available for short periods. Even a million, if it is available for only two days, produces a considerable amount of interest, and there are many millions that can be depended upon as not being required for at least a few days, a few weeks, or perhaps a month. Thus we get the various kinds of "money" as it is called in the money market: short money, medium money, long money. The banks always have a very large quantity of money which they want to invest, but which they must be able to obtain on demand.

The readiest means for the investment of this money is through the bill brokers. The broker takes his bills to the bank, and obtains money at a cheap rate, and the cheapest money he can get is "call money," which he always knows he may be called upon to refund at any moment. Thus, he is in the position of having only a comparatively small amount of capital, although he has borrowed an immense amount of money, which he may be called upon to refund at any time. I shall have more to say with regard to the actual business point of those transactions in my next Lecture, but what I want you to notice here is how he gets his money. Suppose the money is called in suddenly, what will he do? He will go to other banks, or "run round," as it is termed. Very often, in the course of business, I have to meet gentlemen in the City connected with the money market, and it is really extraordinary how, as you walk along with one of them, you find that instead of saying "Good morning!" to any other broker he may meet, he says "How's Money?" If a broker finds he cannot borrow enough money, what is he to do? He must have money at once, and there is only one place to go to, that is the Bank of England. This is really another example of what is meant by the Bank of England holding the final reserve of gold.

I will now show you how the Bank tries to protect its supply of gold. Every week, when the Weekly Returns are issued, the Bank Rate is published. If you were to ask me for an exact definition of the Bank Rate, I should be obliged to say that I could not give you one. I have asked many people who are most intimately acquainted with the subject, but have never obtained a satisfactory answer. Some say that it is the minimum rate at which bills can be discounted at the Bank of England, but this is not absolutely correct, and I can only say that it is a general indication of the terms upon which the Bank of England is willing to transact business.

Up to 1845, the Bank had kept its rate of discount practically at 4 per cent. throughout, but from that time forward it began to discriminate between first class bills and second class bills, long dated bills and short dated bills. "First class" bills are acceptances of the wealthy banks and banking houses which have been endorsed by well known people of undoubted standing. The published Bank Rate is applicable only to such bills as these, which are sometimes referred to as the finest paper.

It has been a recognized custom for a very long time for the Bank of England to allow their own customers such a rate of discount as would be allowed in the open market. Generally speaking, the Bank Rate is higher than that ruling in the open market. This being so, you may naturally ask, how does the Bank of England get any business? The only answer I can give is: Because there is never enough money in Lombard Street to go round without assistance from the Bank. There must always be a certain relationship between the Bank Rate and the market rate. In times when bills are scarce and money plentiful the Bank gets less business, for in these circumstances the difference between the Bank Rate and the market rate widens, and the Bank, in order that it may get its fair share of business, lowers its rate. On the other hand, when bills are plentiful and money scarce, the difference between the Bank Rate and the market rate decreases, and the Bank is in a position to increase its charges for discounting, and accordingly raises its rate.

So far the operations of the Bank of England are similar to those of any other bank, but the raising of the rate presents some features which are peculiar to itself. When

money is scarce, the demands made on the Bank reduce the reserve. The Bank cannot, as we have seen, restore it by merely refusing to renew bills, as this would injure it in other ways, and the only method open to it is to raise its rate above that of the Continental countries in order to attract gold from them. When the rate is higher here than abroad, gold will be sent over to England in order that it may be more profitably employed. As I have said, there are always large amounts of money available for short term investments, and such sums are readily attracted to the place where they can be most profitably employed. If the Bank raises its rate of discount and is followed by the general market, the natural result is that higher rates can be paid for short deposits, and in this way the necessary surplus of gold is generally attracted to this country when required.

At times it may happen that the Bank of England finds it necessary to raise its rate, but cannot make it effective because there is plenty of money in the open market, and consequently competition for discounting is too strong. In such circumstances the Bank takes steps to drain the market of some of this money, which it can do in many ways, one of which is generally referred to as "borrowing on the open market." You will find it stated in some text-books that the Bank of England drains the surplus money from the market by selling Consols, or some other readily saleable securities, for cash, and buying them back for the account. Upon enquiry I find that this has not been done for several years, but I had better explain how such an operation could be carried through.

Some securities, such as Consols, are subject to monthly settlements, that is to say, purchases and sales for the accounts are settled monthly instead of fortnightly as is the usual custom with most Stock Exchange securities. If the Bank of England, at the commencement of a monthly settlement, purchased a million pounds' worth of Consols, it would not be called upon to pay the money until the end of the month. If, therefore, at the same time, it sold a million pounds' worth of Consols for cash, it would by so doing obtain a loan of £1,000,000 for a month, and at the end of that time would still hold the same amount of Consols.

Before leaving the question of the Bank Rate, I must say something on the question of the Foreign Exchanges, by which

expression we indicate all those transactions by means of which international indebtedness is settled. Let us take the case in its simplest form. A, in London, buys goods value £100 from C, in Paris; B, in London, sells goods value £100 to D, in Paris. Then A will have to remit £100 from London to Paris, and D will have to remit £100 from Paris to London, and there will be the cost of transmission for £200 in all. The matter, however, can be much more economically arranged, so as to avoid any transmission of money, in the following manner. C, in Paris, draws a Bill of Exchange for £100 on A, payable in London; D, in Paris, buys this bill from C for £100 and remits it to B in London. B presents it to A, who pays him £100. The effect of this arrangement is that A pays B the money that he owed C, and D pays C the money that he owed B, and the matter is carried through without any coin crossing the Channel.

Now let us take the same people again, and let us suppose that A, in London, buys goods value £90 from C, in Paris; and B, in London, sells goods value £100 to D, in Paris. Now C, in Paris, draws a Bill of Exchange on A, in London, for £90. D, in Paris, buys this bill of £90 from C, and remits it to B. B presents it to A, who pays B £90. This settles the account between A and C, but D still owes B £10, and this he has to remit in gold, and in consequence the cash in this country is to that extent increased, or *vice versa*.

The actual operation of the exchanges which has been stated in its simplest form are affected by buyers going into the places where bills are to be found, *i.e.*, the various money markets, and buying bills payable in the country of persons from whom they have made the purchases, and remitting these bills in payment. The price they have to pay will, of course, vary according to the number of bills offering, but there is a limit to these variations. Taking the example of the French Exchange, the equivalent to an English sovereign is 25.225 frs., and this is called the mint par of exchange. When a debtor in England wants to remit £100 to France, it would seem that he has to buy a bill for 2,522½ frs., payable in France. This, however, will only be the case when the supply is just equal to the demand, or, in other words, when the indebtedness of both countries is equal, which of course is not often. If there are not enough bills, the debtor will have to pay more than £100 for his bill of 2,522½ frs. As

the cost of freight, insurance and other incidental expenses involved in sending gold to France amounts to about 10s. per cent., he will not pay more than £100. 10s., which is equivalent to 25.09½ frs., for £1. Therefore the exchange on France cannot fall below 25.09½ frs., for if it does it will be cheaper to send gold. On the other hand, he will not be able to buy a bill for 2,522½ frs. for less than £99. 10s., which is equivalent to about 25.35 frs. for £1. Therefore the exchange cannot rise higher than 25.35, for if it does it will pay the seller better to remit the bill to his correspondent in Paris for collection, and pay the cost of the transmission of the specie. These two limits are called the gold points.

The following extract from Clare's Money Market Primer will explain the somewhat confusing terminology of the exchanges: "When a rate in foreign money rises above par, bills are at a discount, and when it falls below they stand at a premium; but, as it would sound odd to say that the exchange had fallen to a premium, or risen to a discount, these terms are in practice avoided, and we say instead that the exchange has moved for or against us, or simply, that it is higher or lower. The expressions 'favourable' and 'unfavourable' are also constantly met with."

The connection between the Bank Rate and the state of exchange will now be apparent, for if the exchange is rising to gold point, it will be evident that gold will soon be exported, and as this will be taken from the Bank the reserve will be decreased. It will therefore be necessary for the Bank to raise its rate of discount in order to attract gold from abroad, if the amount exported is likely to reduce the reserve to a dangerous level. We have seen that by raising the rate in London above the Continental rate it becomes more profitable to buy in London than at home. The effect of this is that the balance of indebtedness is changed in our favour, and consequently the exchanges will fall.

The balance of indebtedness is primarily a matter of international trade, but it would be fallacious to base any deductions on the statement of exports and imports published by the Board of Trade. There are so many other items, such as securities sold or bought in London on foreign accounts, shipping dues, interest on loans, drafts for bankers, travellers, &c., and speculative operations, which affect the balance of

indebtedness, that it is impossible to obtain any reasonable idea from any published returns. In addition to this, London, from its prominent position in the money markets of the world, has become the international clearing house, and the transactions which take place on this account have a powerful effect on the exchanges.

The movements of gold to and from the Bank on foreign account, are posted up on the walls at the close of each day.

THIRD LECTURE.

The Constitution and Operations

OF THE

Bank of England.

(Concluded.)

IN the present lecture I want to draw your attention to the effect of some of the crises which have taken place since 1844. There have been several, and I think it is certainly advisable that those who are studying the subject of the Bank of England should carefully examine the history of all the principal crises. Before I say anything in reference to any of them however, I want, if possible, to give you some idea of the meaning of such expressions as “dear money,” “cheap money,” and “the demand for money.” Whenever you read about these crises you encounter some such statement as “the demand for money was great.” Before you can possibly understand what that means it is necessary to have some distinct idea as to what “money” in this connection represents. In the first place, I may mention that the total amount of cash in Great Britain is estimated roughly at about 125 million pounds, but as this includes the money in active circulation it is not all available for building up credit. The amount of “money” for discharging debts, &c., is to a very great extent represented by the credit which is built up upon a concentrated amount of cash. So long as cash is spread about, that is to say, so long as it is in people’s pockets and cash boxes, it is impossible for it to augment the amount of credit with which the business of the country is carried on. The total amount of cash available in the country bears only a very small proportion to the total of the assets of the country, which are estimated at about £12,000,000,000 sterling. The amount of money is only of importance with regard to active transactions that are taking place. The total amount which goes through the Clearing House in London, Manchester, and Liverpool in the course of the year is about £12,500,000,000, but a large proportion of the items that enter into this total are merely book entries and do not really seriously disturb

the amount of money. It helps us, however, to form some idea of the enormous bulk of these transactions, which are mostly carried through by means of the credit system.

Now what I wish to explain as simply as possible is how the supply of money in the money market is governed. In the first place you must remember that money is used merely for the purpose of arranging the active transactions which take place. Thus supposing that one of us having saved up, say, £1,000, decided to buy a house. Whilst the actual purchase was taking place there would be a strain on the money market to the extent of £1,000, but when once the house is bought the strain ceases. The house is still of the same value and is referred to as a security, but it no longer influences the money market. There is no longer any necessity for the £1,000 as "money."

There are two things which may cause a disturbance in the money market; in the first place a greater demand for money, such as results from an increase of trade, and secondly, any disturbance of the credit system.

To exemplify these statements I will now call your attention, in the first place, to the panic of 1847, which was the first that occurred after the passing of the Bank Act of 1844. Years ago a theory was held that these crises were bound to occur at regular intervals, and when one comes to look at their steady progression, it does seem as if this might be so. For instance, there were panics in 1753, 1763, 1772-3, 1783, 1793, 1815, 1825, 1836-9, 1847, 1857, 1866, 1878, and 1890. The doctrine was held very strongly by Professor Jevons, and the dates certainly seem to suggest that there might be some reason for this constant period of about ten years. One suggested explanation was that panics were the results of sun spots. The suggestion was not so absurd as one might at first imagine. It was argued that sun spots caused good harvests, good harvests caused a large amount of available cash, the available cash caused speculation, and speculation inevitably resulted in panics. It is now generally accepted that these disturbances are functional and not organic, and are really spasmodic symptoms illustrating the results of a temporary suspension of the laws which regulate the ordinary currency of a nation when confidence between man and man is lost.

From its foundation in 1694 until 1844 the Bank of

England had kept its rate at 4 per cent., having only altered it once or twice, but immediately the 1844 Act was passed it was reduced to $2\frac{1}{2}$ per cent. in order to compete with the open market. The effect of a wealthy institution like the Bank of England bringing its funds into the market for the purpose of lending and discounting bills at such low rates of interest was very great throughout the country and induced a considerable amount of speculation. This was increased by the good harvests of 1842-3-4, which had helped to swell capital to an unprecedented extent. But still more important was the commencement of the great railway boom. There were many other forms of speculation, such as mills and mines, which would have excited comment had they not been over-shadowed by the railway mania. In order to give you some idea of the latter, I may mention that in 1845 Parliamentary sanction for 340 millions of capital for new railway schemes was applied for. In addition there was an enormous amount of scrip selling in the market, of companies that had not really been started, but which hoped to obtain Parliamentary sanction in the near future. That scrip, moreover, was in most cases selling at a considerable premium. It is estimated that certainly over 500 millions was devoted to railways in the year 1846. To show the extent of the fever of speculation I may say that Midland stock, which was selling in January at 114 per cent., by July had risen to 188 per cent.; Great Western stock was selling at 156 per cent. in January and 228 per cent. in July, and the Manchester and Leeds stock sold in January at 126 per cent. and in August at 215 per cent. You can readily imagine from such figures as these what an enormous amount of speculation had been encouraged by various causes. It is estimated that over 50 millions of capital was actually expended on railway enterprise in the years 1845-6, and a further 26 millions in the first half of 1847.

Now of course, this large expenditure of capital took up a very considerable proportion of the available amount of floating cash supplies. In 1845-6 there were very bad harvests, and consequently in 1847 there was a large amount of corn imported into this country, leading to gold being exported in payment. I am anxious to show you how it was that the credit system of the country was disturbed, and to make it

quite clear that the first thing was the encroachment upon the available cash supply. The exportation of gold continued until 1847. Simultaneously the Government borrowed £3,500,000 on deficiency bills, and that used up a further considerable amount of the available cash. As a result, to avoid the further depletion of its reserves, the Bank raised its rate to 5 per cent. in April. The amount of bills the Bank would discount was strictly limited, no matter how high the credit of the persons tendering them. At the same time advances were stopped and no renewals of loans were granted. A little later in the year the Government was negotiating a loan for 8 millions, and although there was considerable trouble in the money market at the time, and the Bank ought probably to have raised its rate again, it did not like to offend its all-important customer, the Government, by endangering the success of this large issue, so the rate was allowed to remain low. A little later on the rate was put up and the panic subsided for the time being. The Bank came in for a good deal of criticism for not taking measures to protect its reserves earlier, and for not taking more active measures to allay the trouble, but it pleaded that it would have been an act of discourtesy to put the rate up while the Government was negotiating for the loan. This indicates that it was not possible to conduct the banking department like any other bank, and it would seem that the convenience of the Bank's most powerful customer prevented its studying the wants of its other customers.

All this while the railway boom continued and a large amount of cash was still being taken. The result of the bad harvests in the previous years led to very great speculation in wheat. The price of wheat in May was 131s. per quarter in the Windsor market (I believe the present price is something under 40s.), and from that time imports of corn were encouraged by high prices and came in very rapidly, so that by September there was a tremendous break in the market and wheat fell very rapidly to 50s., causing a large number of failures. These failures, which commenced in August, continued throughout September and re-acted on the Bank. The pressure began by the Bank raising its rate and trying to hoard its money to prevent any undue encroachment upon its reserves. On the 2nd October the Bank adopted even

more stringent measures and refused outright to lend on Stock or Exchequer bills, and the result was almost immediately *a panic*. Money was urgently wanted in all parts of the country and suddenly it was found that the Bank of England, the one place people had been depending upon as the last resort, failed them.

In order to give an idea of the stringency of money, that is the high price which had to be paid for the accommodation of ready cash, I may mention that Consols, which stood at $84\frac{1}{2}$ for the account due on the 14th October, were selling for cash at $83\frac{1}{2}$. This meant that you could buy £100 stock of Consols, to be delivered and paid for at the next account day, for £84. 10s., but the same stock would only cost you £83. 10s. if you paid for it at once in cash. The number of days to the end of the account was only nine, and it will be found that this represents a rate of interest of about 50 per cent. per annum. Those who were pressed for money, therefore, and sold Consols for cash, paid at the rate of 50 per cent. per annum for this short accommodation.

On the 13th October, the Royal Bank of Liverpool stopped payment, and there was a very large number of failures all over the country. The state of things on the 23rd October threatened to involve a total suspension of all business and all payments. Then, too late, the Bank began to relax its stringent measures; they found they must lend, and as a consequence the reserve rapidly decreased, until it represented only 15 per cent. of the deposits. This so frightened a number of large merchants in London, that they sent a deputation to the Government asking that the Bank Act should be suspended, that is to say, the Bank should have the power of issuing more notes against securities, in order to increase the amount of available cash, which was really what was wanted. However, the Chancellor of the Exchequer refused, but a little later there was another deputation of city bankers, who drew such a picture of the terrible consequences which would ensue if accommodation were not forthcoming that at last the Chancellor gave way, and on the 25th of October a letter was addressed to the Governor of the Bank by the First Lord of the Treasury and the Chancellor of the Exchequer recommending the Bank to enlarge its discounts and advances upon approved security, and undertaking to obtain an indemnity from Parliament should this

course lead to a breach of the law. This letter was made public at one o'clock, and the panic was over immediately. One eminent banker said that the letter produced its effect in ten minutes, for it was only necessary for the people to be assured that they could get money if they wanted it to at once restore confidence. Of course, the reasons for this are many. In the first place, when people fear there will be a scarcity of money, their idea is to get it whilst they can, and lock it up at home, so as to have cash by them at a time when otherwise they might not be able to obtain it. When you consider the comparatively small amount of actual cash in the country, and the enormous credit which is built up upon that cash, you can readily understand that it takes a very little hoarding to encourage a decided panic. Directly the public knew they would be able to get money when they wanted it, the money hoarded up was taken back to the bank for the sake of the interest it would earn.

There was a Committee of Enquiry after this panic, at which the Governors of the Bank of England said they did not want the Act relaxed. They said that the Bank would have had no difficulty in continuing payment, that they did not ask, either directly or indirectly, for the suspension of the Act, and that the Government's letter was not sought for by them. Of course, everyone knew they could not have done so, and I do not know exactly why they said it. The Report of the Committee of Enquiry recommended that some relaxation of the 1844 Act should be allowed, but no effect was given to this recommendation.

The next panic occurred in 1857. The year opened quietly with every appearance of commercial prosperity, but during the year the Indian Mutiny broke out, and Consols, which started at $97\frac{7}{8}$, fell to $87\frac{1}{8}$ by November. Even as late as August trade seemed to be pursuing an even course, but in the middle of September revelations of a gigantic swindle in America were made. Railway accounts in that country had been falsified and the usual features of a panic followed. Depreciation of stock, runs on banks, and commercial failures shook American credit to its foundations. An extract from the *Times* of September 10th, 1857, will be instructive:—
 “There is actually a powerful combination for the avowed purpose of bringing all the principal undertakings to ruin.
 “A large body of active persons are known to be associated

“for the purpose. They influence the Press to work out their views, and are alleged not merely to operate with a joint capital, but to hold regular meetings, and permanently retain legal advisers, whose chief vocation it may be assumed is to discover points that may enable the validity of each kind of security to be called in question and thus to create universal distrust.” The intimate connection of Liverpool and Glasgow with America soon caused the failures to spread to these towns, and very shortly failures became general all over the country and the underlying rottenness of the commercial world became apparent. The pressure in America caused huge quantities of gold to be exported by us to that country. On the 8th October the Bank Rate was raised to 6 per cent., on the 12th to 7 per cent., on the 19th to 8 per cent., on the 5th November to 9 per cent., and on the 9th to 10 per cent. Since the middle of August the bullion in the Bank had sunk from £10,500,000 to £6,500,000 and the Reserve from £6,250,000 to £1,500,000. On the 12th November the Reserve in London only amounted to £196,607, and at all branches to £384,144. The bankers’ balances stood at nearly £5,500,000. On this day it became evident that the Bank would be compelled to cease payments on the next day unless authority was obtained to suspend the Bank Act. This authority was given at midnight on the 12th, the stipulation being made that the rate of discount was not to be below 10 per cent., and the panic was over immediately. There was this difference between the panic of 1847 and 1857, that whilst in the former year the Act was not infringed, in the latter year the Bank return for the 18th of November showed that £2,000,000 had been added to the securities in the Issue Department under the authority of the Treasury letter. This £2,000,000 appeared in the returns for the five succeeding weeks, and it was not until the return dated 31st December, 1857, that it disappeared. If, however, only the notes in the hands of the public be considered, the infringement of the Act was limited to the returns for the 18th and 25th November. On this basis the excess issue on the 18th November was about £850,000, and on the 25th November £80,000. Gilbert says that the notes issued between the 13th and 30th November in excess of the authorized issues amounted to £6,776,000, but this does not appear in the weekly returns. If the cash in the Banking

Department be taken into account the Act was apparently only infringed in the return for the 18th November. It is interesting to notice that the Bank paid the Government, on account of the profit made on the issues in excess of the authorized amount, the sum of £4,493. 3s. According to the *Times* for 14th November, "The Government letter was not asked for by the Bank Directors and they said they could have weathered the storm without it." In view of the very small amount of cash they had in hand and with the possibility of the bankers' balances being demanded, how they could have avoided suspending payment had the Government letter been withheld I do not know.

In stating the causes of the crises of 1847 and 1857 we may say that the former was caused by railway speculation at home, and the latter by speculation and overtrading abroad.

After the panic of 1857, trade became stagnant, which, it may be said, is usual after any panic. This quietness lasted well into 1863, when the derangement caused by the American Civil War, and the consequent stoppage of the supply of cotton from that country, threw the commercial world out of gear. As cotton had to be obtained, fresh supplies had to be found, and in most cases these had to be paid for in cash, with a consequent strain on the supply of cash in the country. About this time it became evident that trouble was in store owing to the large number of companies which had been formed under the Companies Act of 1862. Up to March, 1864, 263 companies had been formed under this Act, including 27 banks and 15 discount houses, and according to Mr. Macleod, "The long dated acceptances of these companies began to press on the market and laid the foundation of the panic of 1866." The influence of these unsound companies was felt all through 1865, and on one occasion in the October of that year, the Bank Rate was advanced three times in nine days from 4 per cent. to 7 per cent. In January, 1866, it was raised from 7 per cent. to 8 per cent., and this was effectual for a time. During this time Joint Stock Companies were being wound up daily without causing serious trouble beyond creating suspicion in the market, but in April the Joint Stock Discount Company failed, and on top of this Barned's Bank in Liverpool failed for £3,500,000. By this time the panic had started in earnest. On the 3rd May the

Bank Rate which then stood at 6 per cent. was raised to 7 per cent., on the 8th to 8 per cent., and on the 9th to 9 per cent. On the 10th occurred the greatest disaster which the money market had ever witnessed, viz., the failure of Overend, Gurney & Co. The paid-up capital of this company was £1,500,000, and their liabilities over £10,000,000. It had a world-wide reputation and was probably better known outside the United Kingdom than any other British firm. It was one of the landmarks of the City and possessed practically unlimited credit. The announcement was not made until after banking hours, but the scene which took place on the next day beggared description. The following extract from the *Times* will give an idea of the state of the City: "The doors
 " of the most respectable banking houses were besieged, more,
 " perhaps, by a mob actuated by the strange sympathy which
 " makes and keeps a mob together, than by the creditors of the
 " banks; and throngs, heaving and tumbling about Lombard
 " Street, made that narrow thoroughfare impassable. The
 " excitement on all sides was such as has not been witnessed
 " since the great crisis of 1825, if, indeed, the memory of the
 " few survivors who shared that panic can be trusted when
 " they compare it with the madness of yesterday. Nothing
 " had happened since the day before to justify such a fear as
 " was everywhere shown. Rumour, however, like the false
 " woman in the laureate's legend, 'ran riot amongst the
 " noblest names,' and left no reputation unassailed. Each man
 " exaggerated the suspicions of his neighbour; and until a
 " report, at that time unfounded, was circulated in the
 " afternoon, that the Government had authorized the Bank
 " Directors to issue notes to the extent of five millions beyond
 " the limit imposed by the Bank Charter Act, it seemed as if
 " the fears and distrust of the commercial world had become
 " boundless." A further extract from the *Bankers' Magazine*:
 " A greater crash has never taken place in any one week in
 " any country in the world. Looking at the list of suspensions,
 " it will be seen that their business ramifications are more
 " than European. More or less they embrace all the four
 " quarters of the world, and we have yet to feel the reaction
 " from the effect which the news will produce as it extends
 " from point to point."

The indescribable state of panic could only have one result, the total wreckage of the whole banking system,

unless quieting measures were forthcoming. On the 11th May the Chancellor of the Exchequer received a deputation from the banks, and after hearing them the suspension of the Bank Act was sanctioned. During this day the advances made by the Bank of England had been enormous. In the morning at the opening of business the Reserve stood at £5,750,000. At the close of the day's business the amount was less than £3,000,000, or little more than half. As in 1847 and 1857 the Bank of England did not ask for the suspension of the Bank Act. The following extract from Patterson's *Science of Finance* will make plain what took place: "It was midnight before the announcement was made. "In the interview which the deputation from the banks had "with the Chancellor of the Exchequer, the necessity of "suspending the Act was urged upon the Government by all "present, except the representative of the Bank of England." This apparently was mere bravado on the part of the Bank. Indeed, one of the representatives of the Joint Stock Banks is reported to have said plainly, addressing the Bank's representative, "I can draw a couple of cheques to-morrow morning which will shut you up at once." The Bank Directors knew this quite well; but they knew also that they could indulge in bravado safely, as it was perfectly certain that the Bank Act must be suspended. The effect of the announcement of the suspension of the Bank Act was so salutary that next day (Saturday) it was generally thought that the crisis was at an end.

Unlike the previous crises, however, the suspension of the Bank Act in 1866 did not mark the end of the crisis, and in the following week three London banks had to suspend payment owing to the demands that were made on their resources. Two of these subsequently resumed business.

The Bank Act was not broken on the occasion of the 1866 crisis, but how near it was may be seen from the following figures taken from the weekly return:

	Deposits.	Cash.	Proportion.
May 17th	25,086,713	1,202,810	4·8%
May 24th	25,336,801	1,388,216	5·5%
June 1st	27,199,322	859,980	3·2%
June 8th	27,423,904	2,821,041	10·3%
June 29th	29,364,399	5,218,409	17·6%

It will be seen that the Reserve reached its lowest point nearly three weeks after the suspension had been authorized. The smallness of the Reserve, however, did not cause alarm, as it was known that it could be replenished by the issue of notes against securities. The panic passed away slowly, the Bank Rate standing at the panic figure of 10 per cent. until the 6th August when it was reduced to 8 per cent.

That the crises of 1857 and 1866 were allowed to develop into panics was due in part to the fact that, although the trouble was foreshowed some time before it actually happened, the steps taken to maintain the strength of the reserve of the Bank of England were not sufficiently stringent. Thus at the end of October, 1857, the reserve was under £5,000,000, and in April, 1866, it was under £6,000,000.

This occasion was the last time that the Bank received permission to infringe the 1844 Act. No such situation has been disclosed since 1866. The severe lessons which were inflicted in 1857, and emphasized in 1866 seem to have been taken to heart, and although we have had crises since that date they have not been allowed to develop into panics.

The next crisis to which I will refer very briefly is that of 1890. Before I mention that, I want to call your very careful attention to one or two points. In the crises of 1847, 1857 and 1866, although they were real money panics, in no cases were bank notes discredited. People knew that the bank notes were as good as cash and the notes have always been perfectly secure. The 1866 crisis was the last time when there was any indication of the Bank's reserves being imperilled. There were crises after that, but we do not find there was any real danger of the reserve being encroached upon. The real reason was, I think, that the Bank had at last learned by painful experience that the only way to avoid monetary crises was to let everybody know they could always obtain money when it was wanted, provided that they could give satisfactory security and were willing to pay a comparatively high price for the accommodation.

The panic of 1890 was really caused or brought to a head by the failure of Baring Brothers. They had a very large amount of acceptances. Their credit was extraordinary, but they found they could not meet their bills and this threatened to upset the general credit system in London. It did not, however, actually upset the general credit system in

the same way as had happened in previous panics, because, in this case the Bank of England acted in the most exemplary manner and in so doing was helped by the other banks. The position was suspected and it was feared that something might happen, but before anything actually became known to the public the position had been provided for. About three millions of gold was obtained from France and one and a-half millions from Russia in order to augment the amount of the gold supply in the Bank of England; so that by the time the serious trouble commenced the position had been so strengthened that it was always under control. In the greater part of the country people did not know there was a crisis until weeks afterwards. In the City much more was known, but the result was altogether different from previous cases.

The crisis of 1890 in many respects differed from those of former years, but it might easily have developed into a panic exceeding in magnitude any of its predecessors. In 1857 and 1866 the disturbance was general all over the country, and London had to supply the requisite reserves for the country banks at the expense of its own reserve. In 1890 banks outside London were so little affected that they were hardly aware there was a crisis, and there was no suspicion of danger among their customers. Formerly, things had been allowed to drift, causing wholesale suspensions and creating general alarm. In this case no great house suspended payment, although Barings, one of the largest discount houses, only just escaped. To all intents and purposes, the crisis of 1890 was over before the general public knew anything about it.

1888-9 had been years of great speculative activity, and this period came to an end in the first half of 1890. Part of this activity was due to the Conversion of Consols in 1888, causing a large amount of re-investment. About £65,000,000 had been sunk in loans in the Argentine Republic during 1888-9. The early part of 1890 had also witnessed a strike in the Scottish iron trade, and labour disputes in the shipping trade. The situation in the South American market had been attracting attention, and a loan of £5,000,000 floated by the Argentine Republic in June failed. Soon after this there was a revolution, and a run on the banks of the Republic followed. The fall in South American securities

was very heavy, and the situation from August to October was very delicate. There was a decided under-current of opinion that several houses, notably Barings, had dangerously increased their acceptances, but the world-wide trade and high standing of the firm prevented any suspicion being aroused that it was in difficulties. To indicate the unsettled conditions I must point out that up to the beginning of November there had been no less than nine changes in the Bank Rate. On the 6th the rate was not altered at the weekly meeting, the reserve standing at a little over £11,000,000. On the 7th, however, the rate was raised to 6 per cent., this making the 10th change, and being made on a Friday this caused considerable alarm, and the crisis may be said to have started on that day. The Stock Exchange was very uneasy in view of the impending settlement. On Monday, the 10th, it became known that the Bank was taking special steps to secure gold from abroad, and owing to this the settlement on Tuesday passed off without trouble. On Wednesday, however, the troubles of three banks caused further anxiety, and the feeling became still more strained when a sudden sale of £750,000 Consols was made. Although rumours were flying about, nothing definite was known. The return on Thursday, the 13th, did not present any marked features, the reserve showing only a small decrease on the previous week's figures. On this day it became definitely known that the Bank of France had arranged to lend the Bank of England £3,000,000 in gold and that £1,500,000 was to be purchased from the Russian Government. These measures rather increased than allayed the alarm, as it was argued that they could only mean that a disaster of the first magnitude was impending. Friday was a day of intense anxiety in the City, it being still impossible to ascertain the cause of the trouble until late in the day, when it became known that a meeting of bankers had been held at the Bank of England to consider the affairs of Messrs. Baring Brothers, who had been compelled to apply to the Bank for assistance, and to consider the desirability of forming a guarantee fund, in order to prevent a failure which would inevitably produce a panic. On Saturday it was announced that the scheme had been carried through and that the guarantors were prepared to make good any loss incurred by the Bank in making the advances necessary to enable Barings to meet

their liabilities at maturity. The announcement of the failure and the relief measures at the same time, allayed the feeling of apprehension, and the Bank came in for great praise for the way in which they had carried the matter through. On the following Wednesday there was a sharp return of anxiety owing to unfounded rumours that the Banks were curtailing their advances. These, however, were set at rest on it becoming known that money would be freely lent. The Bank return on Thursday, the 20th, gave evidence of the preparations that had been made to meet possible trouble, the reserve standing at over £14,000,000, an increase of nearly £3,500,000 on the previous week. By the following Monday the market had got back to its normal condition and the crisis was completely over. The effect, however, was felt in the restriction of business for several years. The liquidation which originally was to be spread over three years was eventually extended to four years. The liabilities of the firm were £21,000,000, of which £15,000,000 were on account of acceptances and £4,000,000 on deposits. Amongst the depositors was the Russian Government.

CRISIS OF 1907.

The events of this crisis will be familiar to you. The years 1905-6-7 had been years of unexampled trade all over the world, and this was particularly the case in America and Germany. In America a series of splendid harvests had produced a state of prosperity which had prepared the ground for over-trading and over-speculation. It had been recognized in London for some time before November, 1907, that the situation in America was unsound, and for some time American paper (that is, bills) had been very closely scrutinised, and discounts could only be arranged at very high rates. It was an open question whether the result would be a wholesale breakdown of credit or a gradual liquidation, and, unfortunately, the former proved to be the case. Owing to its better banking system the situation in Germany, which at one time looked equally critical, was tidied over by a gradual liquidation.

The panic started with the suspension of the Knickerbocker Trust on the 23rd October. Two days later the whole of the New York Banks suspended cash payment

except in cases of such cheques as they found it expedient to pay, and within a few hours there was a premium on cash in America.

You will notice I have said "a premium on *cash*"; the usual expression at the time was "a premium on gold," but it is most important that you should notice that the premium was on any form of cash without any special demand for gold as such. Greenbacks, and all other generally recognized forms of paper money, were just as readily taken as gold, and were always exchangeable for the same at their full face value. The great majority of ordinary debts were as usual discharged by means of cheques, which were as usual accepted in full discharge, but if a person went to his bankers and wished to obtain cash for a cheque he was obliged to submit to a discount, that is to say, a cheque for \$100 would be worth only about \$97 or \$98. The prices of stocks and bonds were quoted on the assumption that they would be paid for by means of cheques, and therefore, if paid for in gold or any form of cash, a substantial discount would have been allowed. Of course, the only way of remitting cash from England was by means of gold, and therefore it was most convenient to speak of the premium on cash as a premium on gold.

Recognizing the dearth of currency the bankers engaged huge quantities of gold from Europe, and of course London suffered most of all. In consequence the Bank Rate was put up to 6 per cent. on Monday, November 4, and to 7 per cent. on the following Thursday. At the same time the now usual expedient of borrowing £3,000,000 from the Bank of France was resorted to.

The suspension of cash payments by the New York bankers had an extraordinary effect on the exchanges, as houses in London were very loath to embarrass their New York correspondents by drawing heavily on them and some of the payments for grain and cotton had to be made in gold. To show the strain put on Europe generally, and the Bank of England in particular, in five weeks no less than £15,000,000 in gold was either taken or engaged on American account. It would certainly not be within the syllabus of Part II, to explain the various expedients resorted to by the American Government to restore confidence, but I would here ask you to compare the crises of 1857 and 1907. In the former the panic in America spread

over here and caused wholesale ruin ; in the latter the crisis could not, it is true, be prevented, but owing to the more cautious methods adopted and the precautions taken beforehand the situation was always well in hand and never threatened to develop into a panic.

I must here ask you to notice carefully that during the American crisis the exchange was quoted at about 4·90, which, as you will understand a little later on, is what is called the upper gold point, and would, in ordinary circumstances, result in gold being shipped from America, whereas I have already told you that gold was being shipped into America from Europe at an unprecedented rate. This apparently contradictory state of affairs is easily understood when you remember that all prices were being quoted on the basis of Bank cheques, which were only exchangeable for gold at a discount, and that consequently if the exchanges had been quoted in gold the rate of exchange would have been well below the lower gold point, and this readily explains the rush of gold from Europe to America.

One hundred English sovereigns of full weight are worth about \$486½ gold in America, and owing to the expense of sending gold across from one country to the other, people in America will pay anything up to \$490 for a bill of exchange on London, but at any higher rate it pays them better to remit gold. Again, in London, people with debts due in America will sooner accept a bill of exchange for only \$433 for £100 than go to the expense of shipping gold. Now if the exchanges were at 4·90, measured in Bank cheques, and such cheques were subject to a discount of 2 per cent. for gold, then if I pay £100 for a bill of \$490 it will only realize in New York \$490 less 2 per cent., that is \$480 in gold, and therefore it will be better to ship gold across, and this is actually what was occurring during the American crisis. Let me explain what was happening in another case : Suppose I had a banking account in New York, I could then cable to my agents to purchase for me a bill on London of £1,000, for which I should write a cheque for \$4,900. At the same time I send £1,000 in gold to America, which, on its arrival, will realize \$4,865 in gold, and which when paid into my account will be considered as \$4,962, owing to the premium of 2 per cent, and thus I should make a profit of \$62. Transactions such as these were quite usual with people who

had accounts both in London and in New York and in many cases resulted in large profits, especially during the time when the premium was as high as 3 per cent.

THE ISSUE DEPARTMENT.

A short description as to the methods of working of the Issue Department will be useful at this point. With the exception of the paper the whole of the note is manufactured inside the Bank, which has its own machinery for printing and water-marking. Formerly the process was performed in two parts, the skeleton being first printed, and the number and date printed afterwards as the notes were required. Now, the whole process is completed in one setting, a fairly regular supply being struck off each day. The same department which prints the notes also prints the postal orders and the old age pension coupons for the Government. After being printed the notes are placed in the custody of the Chief Accountant who issues them to the Chief Cashier as required. When they are delivered to the Cashier the Accountant opens credits in his ledgers corresponding to the number and date of the notes issued. A separate credit is opened for each note. The notes are issued when applied for, either to the public or the Banking Department, in exchange for gold. Each note is entered in the books of the Issue Department, and all notes in the clerks' hands are returned to the Cashier at the end of the day, and thus the number of notes issued in a day is known. As we have seen, the Bank is compelled to pay its notes in gold on demand, and each day a large number are so paid. These also are entered in the books of the Chief Cashier, and include those paid into the Banking Department, and which, of course, are eventually handed by the Banking Department to the Issue Department in exchange for gold. By these means the circulation of the notes in the hands of the public each day is known. Notes have never been re-issued since about 1840, and by arrangement the Joint Stock and private bankers also for some time past have adopted the same course of never re-issuing Bank of England notes. When the notes are paid in they are cancelled by tearing off the signature and the amount is punched out. They are then handed over to the Accountant, who marks them off as returned in his ledgers. The number

of notes paid in each day averages about 60,000, about three-quarters of which are £5 notes. I may also mention that about three-quarters of the total number are paid in by bankers. The notes paid in are then put away in the Accountant's library and kept for 5 years, at the end of which they are burnt. The number at present in the library amounts to about 92,000,000. In spite of the number any one of these can be readily traced in a few minutes.

Some very old notes are kept in the Accountant's library ; one is dated 1699, and is naturally very faded and worn. Another note shown was issued in July, 1736, and not paid in until March, 1847, a period of nearly 111 years. I may mention that after a note has been outstanding for 40 years the Bank may cancel it in its books. This, of course, does not in any way render it any less valuable in the hands of a person into whose possession it comes, since it is a distinct promise to pay on demand, and there is no restriction as to when it shall be presented.

Another note that is exhibited is one for £1,000,000, payable to Mr. Newland, who, at the time the note was issued, was Chief Cashier of the Bank. This is the largest note ever issued by the Bank. The number of men employed in the printing and manufacturing of the notes is about 200, and about 500 altogether are under the control of the Chief Cashier. One or two practical points may be of interest. We have seen that the Act of 1844 gives anyone the right to demand notes on tendering gold at the rate of £3. 17s. 9d. per ounce of standard gold, but although theoretically he has the right to demand notes, it is in reality never done when the amount of bullion is considerable. In place of notes it is usual to give a bullion warrant which is for all practical purposes equivalent to notes, and may be paid into the Banking Department or any other bank, whence it eventually finds its way back to the Issue Department. On this account it may occasionally happen that the weekly return of the Issue Department may not show the actual amount of gold in its possession, as notes are not issued until the warrant is returned by the Banking Department. If the period when the warrant is in circulation includes a Wednesday the Issue Department will have an excess of bullion over that shown in the return to the amount of the warrant. When gold is tendered an assayer's certificate must

be handed in at the same time testifying to its fineness, and if this is not forthcoming the Bank has the gold assayed (at the tenderer's expense) before paying out the notes or bullion warrant. If, however, the person is known to the Bank Official, an advance of part of the declared value is made, the balance being paid when the assayer's certificate is to hand. The number of persons engaged in the bullion trade is necessarily limited and they are well known at the Bank and have no difficulty in obtaining an advance before the gold is assayed. Another point is, that when the bullion is sent to the Mint to be coined, the fact that the gold is not actually in the possession of the Bank does not prevent them issuing notes against it. As a matter of fact a large part of the bullion is kept in bars in the Bank's vaults and is never sent to the Mint to be coined at all.

THE BANKING DEPARTMENT.

One of the most interesting parts of the Banking Department is the Treasury. Here in a comparatively small room is kept the stock of cash of the Bank of England, that is, the Reserve, and it is not too much to say that this small room is the pivot on which the financial universe turns. Round the room is a series of safes which contain the notes and gold and silver coin ready to be paid out as required.

The gold is arranged in bags of £1,000 each, 80 being stacked in each safe. Other safes contain the notes of various denominations. The bulk of the money is, however, in the safe which holds the notes of a higher denomination, and as an illustration of how much more easily handled the notes are I may mention that I held notes in my hands to the value of about £13,000,000, but had the greatest difficulty in holding £5,000 in gold. After the gold coin has been paid over the banking counter it is taken to the gold-weighing room where there are several very ingenious machines for weighing the coins. These machines, which work automatically, throw out those coins which fail to come up to the legal tender weight. To show the rapidity with which the work is done, the machines for the sovereigns weigh about 30 a minute. Those for the half-sovereigns work at about twice this pace.

PRIVATE DRAWING OFFICE.

This is the office where the Bank deals with its private customers. The counters are in sections, marked A-F, G-O, P-Z, for convenience. It may be of interest to know the Bank's requirements on opening an account. The first thing required is an introduction from a respectable person well known to the Bank. They will then require to know for what purpose the account is to be used, whether for trading purposes or otherwise, as it is on this information that the minimum balance is fixed. There is no definite rule as to this, but as a rough guide it may be said that for each cheque drawn during the year a minimum balance of £1 must be kept. Thus, if 500 cheques are drawn during the year a minimum balance of £500 will be required, if 1,000 cheques are drawn then £1,000 minimum balance will be required. In the same room all the bills maturing are paid.

The Public Drawing Office is situated close by, and here all the payments and receipts on the Government account are dealt with.

Perhaps the most important office from our point of view is the Discount Office.

DISCOUNTING AND LOAN BUSINESS OF THE BANK OF ENGLAND.

The banking department does a large business both by way of discounting bills and granting loans on bills or other securities known as "floaters." Naturally you will want to know what "floaters" are, for I suppose it would be a perfectly allowable question for the second year examination. I think a sufficient definition would be to say that "floaters" are securities to bearer which are accepted by the Bank of England as security for market loans. They consist of

- (1) British and Indian Government securities.
- (2) Treasury bills and exchequer bonds.
- (3) Short-term debentures of Indian railways guaranteed by the Indian Government. These are generally for terms of about five years but never more than seven years.
- (4) Indian Government treasury bills.
- (5) London County Council treasury bills

- (6) Any corporation bills which have been issued by the Bank of England, *e.g.*, Liverpool, Birmingham.
- (7) Short debentures of the City of London Corporation.
[There are not many of these, but they are used as a sort of make-weight.]

No foreign government bills are admitted as "floaters."

Anyone wishing to discount bills at the Bank of England must have an account with the Bank, but I must explain that the mere holding of an account with the Bank does not necessarily mean that you are a customer of the Bank of England, and as such may expect preferential treatment with regard to the rate at which your bills would be discounted at times when the market rate is considerably below the Bank Rate. All the big firms of bill brokers in London have small accounts with the Bank, generally not more than £1,000, but the Bank recognizing them as part of the necessary machinery of the money market is quite prepared to consider application for advances for very large sums, amounting in some cases to £1,000,000. It would be difficult to give you any idea of the enormous amount of bill discounting done in England, of which by far the most is done in London, and the whole complicated system revolves round and depends finally upon the Bank of England.

The discounting of bills in London is mostly in the hands of—

1. *The Clearing Banks.*—The banks discount the bills of their own customers whom they know personally and of whose credit they are in a position to judge. The firms of brokers in London could not possibly deal with these bills at first hand, and as the clearing banks never by any chance re-discount the bills they have taken, you will see that this class of bills never comes into the market.

2. *Discount Houses.*—There are two or three discount houses which do a large discounting business.

3. *Bill Brokers.*—There are about a dozen firms of bill brokers whose business for the most part consists of bills drawn from abroad on London banking firms.

I will explain one way in which foreign bills reach the London bill brokers, and in so doing I may enable you to gain some idea of the way in which monetary transactions in the most distant parts of the world depend to a very large

extent on the Bank of England. A number of cotton growers in the Southern States of America who individually are quite unknown, sell their crops to big cotton buyers in their own country. These buyers sell the cotton to brokers in Liverpool, but even these Liverpool cotton brokers are not sufficiently well known to enable the bills accepted by them to be readily negotiated in the London market. This difficulty, however, is easily overcome by the Liverpool brokers, who pay the banks to accept the bills for them. The bills are consequently drawn on the English banks and with the documents attached are readily saleable to the American banks who are always eager buyers of such well secured bills. The American banks remit the bills to England to be discounted after acceptance by their London banking correspondents. These banking houses [I am not referring to clearing banks] sell the bills to the bill brokers, and I shall show you in a few minutes that in many cases they find it necessary to take these bills to the Bank of England, either to obtain a loan on them or to have them re-discounted. I must now explain as briefly as possible how the London bill brokers conduct their business. Of course, as I have already explained a great part of the money they use for discounting is borrowed, and in order to make a profit it is necessary that they should borrow at a cheaper rate than that at which they discount their bills. Now, in all normal times there are large amounts of money available for very short investments. I have already explained what is meant by call money, and why it is that the banks lend such large sums to the brokers at very cheap rates on the understanding that it shall be returned whenever demanded. The brokers also borrow money from week to week, and again from the India Council for two, three or four weeks. The London County Council also has money which it lends for a few weeks at a time, and in this case the loans are tendered for, the highest bidder obtaining the loan. In the money market there is no time recognized except between 10 and 4. Every day the bill broker must send round to all the bankers from whom he has obtained call money to see whether any of it is required to be repaid. If called upon to repay in one place he of course endeavours to borrow in another as cheaply as possible, but often he finds that he cannot borrow sufficient without going to the Bank of England. This he refers to as being "forced into the Bank," and as it

costs him more to borrow from that source he naturally looks upon this as his last resource, but he quite recognizes that the Bank is an absolute necessity to him.

Now let me explain exactly what he does when he finds it necessary to go to the Bank. By about 12 o'clock he knows his position for the day, and he goes down to see Mr. Child at the discount office of the Bank of England and tells him that he is coming to him for £100,000, either as a loan, or by re-discounting some of his bills, and arranges terms with him as regards the rate of interest and the period of the loan, or, in the case of discounts, the average maturity date of bills which Mr. Child is ready to accept and the rate of discount to be charged. I must mention that the Bank will not discount any bills which have more than 90 days to run.* Some time before 2 o'clock the bill broker sends his clerk round to the Bank with the bundle of securities, and before 4 o'clock the bill broker draws a cheque on the Bank of England, less interest in advance in case of a loan, or less discount where the bills are discounted outright. I may here say that the Bank of England never re-discounts bills which they themselves have once discounted. I have impressed upon you several times that it is the ultimate resort of the money market, and it is quite impossible to imagine how the existing system could be continued if the Bank, having once discounted bills, subsequently let them come on the market again. If the bill broker obtains a loan such as I have referred to for, let us say, seven days, then at the end of that period he must go down to the Bank of England to pay off this loan by means of a "Bank Transfer," that is, a cheque drawn by a clearing bank against its balance with the Bank of England. India Council Loans, which I have previously mentioned, must be paid off in the same way by "Bank Transfers." I want to impress upon you why it is that these repayments are required to be made by "Bank Transfers." You will see, if you have followed all I have told you, that nearly all of these transactions have necessitated merely book entries by the Bank of England, the actual money having really remained with them the whole time. The more one studies the banking system which has its centre in the Bank of England the more struck one must be by the wonderful economy effected by it.

* Frequently the bank will not take bills of more than 60, or even 30 days.

Let me give you another example of much the same kind. When the quarterly dividends fall due on Consols it often happens that the Government has not sufficient money to pay them conveniently, and has to borrow from the Bank. This borrowing is effected, as we have seen, by deficiency advances, on which the Bank receives interest, but the dividends so paid for the most part never leave the Bank of England, because most of the dividend warrants return to the Bank through the clearing banks.

There are two great differences between the loans obtained by brokers from the Bank of England and those obtained from other banks, namely: (1) The Bank of England never lends Call Money; (2) the Bank requires a margin of 5 per cent., whereas the other banks require no such margin; in both cases, however, the security is practically identical, though the other banks will deal in bills of a rather longer term. The Bank of England has a custom of lending on floaters and bills with a term of not more than 60 days at a rate $\frac{1}{2}$ per cent. above Bank Rate. The usual term of these loans is 7 days, although sometimes it may be more or less. The Bank never accepts repayment of a loan on a Saturday, although it will lend on that day, and in such cases, therefore, the loans are necessarily for longer or shorter periods than 7 days. The bills accepted by the Bank of England must have two English names, that is, English residents of some standing. The acceptor must be English and the endorser must be English. Let me explain what I mean. The Bank will take in as collateral a bill accepted by Messrs. Brown, Shipley & Co. and endorsed by the bill brokers, but they will not take as collateral a bill accepted by the Credit Lyonnais of Lombard Street, and endorsed by Brown, Shipley & Co. and a broker. Of course, many of these latter bills are taken by the brokers, but they cannot take them to the Bank of England.

DIVIDEND OFFICE AND DIVIDEND PAY OFFICE.

There are one or two other offices, such as the Dividend Office, where the personal applications for dividend warrants on stocks managed by the Bank are dealt with, and the Dividend Pay Office where these warrants are cashed. These, however, have lost much of their importance, the great proportion of warrants being posted or paid into the other bankers' accounts with the Bank.

FOURTH LECTURE.

The National Debt.

THE subject of this and the two subsequent lectures is the National Debt. A considerable portion of the time will be taken up with the early history of the Debt because, in my opinion, a correct understanding of the methods which were adopted in early times is necessary to enable us to understand fully those that have been adopted more recently.

Probably ever since there has been any form of Government in this country, borrowing in some form or other for Government purposes has taken place. Even as early as 1424 I find reference to debentures, letters patent, and tallies, but there appears to have been no arrangement for the payment of interest on these loans until as late as 1545. One might naturally wonder how there was sufficient inducement for the people to lend their money in those times, but I need only remind you that in those good old days they knew of other arguments besides the mere payment of interest to induce people to come forward as readily as possible.

One of the early methods of borrowing was by means of what were known as "privy seals." These were requests addressed personally to the principal nobility and gentry in all the counties in England by the Sovereign. The wording of them is really so curious that I should like just to give you an example. I have one here which was issued by James I. in 1604:

"Trustie and Well Beloved, wee greete you. Although
"there be nothing more against our minde than to be drawne
"into any course that may breed in our subjects the least
"doubt of our unwillingness to throw any burthen upon them
"having already published both by our speeches and writing
"our great desire to avoide it in the whole course of our

" Government; Yet such is our estate at this time, in
 " regarde of great and urgent occasions falne and growing
 " daily upon us (in no sort to be eschewed) as wee shall be
 " forced presently to disburse greater summes of money than
 " it is possible for us to provide by any ordinary means, or to
 " want without great prejudice, in which consideration seeing
 " no man of any indifferent Judgment or understanding, can
 " either plead ignorance how much we found the Crowne
 " exhausted by the accidents of foreine warres and inward
 " rebellions or on the other side doth not observe the visible
 " causes of our dayley expence ever since wee came into this
 " kingdome, wee think it needlesse to use any more arguments
 " from such a king to such subjects: But that as our
 " necessitie is the only cause of our request, so your love and
 " duty must be the chiefe motive of your ready performance
 " of the same. To which we may further adde one thing
 " which is no lesse notorious to the realme, that since wee
 " came to this estate no one means or other of extraordinarie
 " helpe hath been affourded us, notwithstanding more extra-
 " ordinarie occasions of large expense, one falling on the
 " necke of another without time or respiration, than ever
 " lighted upon any king of this realme. A matter whereof
 " wee make not mention as proceeding from the coldnesse of
 " our people's affections, of whose service and fidelitie in the
 " highest points wee have had so cleare proof, but rather as a
 " circumstance the better warranting this course, seeing the
 " ordinarie fourme of subsidies offered to princes in Parlia-
 " ment caried with it now that inconvenience of burthening
 " the poorer sort of our people, which wee doe endeavour to
 " eschew by all the wayes wee can. You shall therefore
 " understand that in this consideration and in respect of our
 " opinion of your good mind towards us, however the omission
 " in the former time to repay some loans in regard of
 " unexpected violent necessities might make a doubtfulnesse
 " how that promise should be kept, wee have persuaded
 " ourselves that you will no way measure our princely
 " resolution by the precedent accidents, nor ever doubt of us,
 " when wee engage that word yet never broken to any,
 " which now wee do hereby give for repayment of whatso-
 " ever this Privie Seal of ours shall assure you. That which
 " we shall require therefore, is that within twelve days
 " after the receipt hereof, you will cause the summe of

"to be delivered to.....
 " whom we have appointed to be our collector in our countie
 " of..... The loan whereof we do desire to
 " be untill the Foure and Twenty day of March, which shall
 " be in the yeare of our Lord God 1605 for assurance whereof
 " we have directed these our letters of Privie Seale unto you
 " which with the hand of our sayd collector testyfyng the
 " receipt of the sayd summe of.....
 " shall bind us, our heirs, and successors, for the repaiment
 " thereof, and shall be an immediate warrant to our exchequer
 " to pay the same unto you, upon the deliverie of this our
 " Privie Seale unto our sayd receipt.

" Given under our Privie Seale, at our Palace of West-
 " minster the last day of July in the second year of our reigne
 " of England, France and Ireland and of Scotland the Eight
 " and Thirty."

This is probably the latest instance of the Sovereign raising a considerable amount of money by loans in this way, the general method of borrowing in the 17th century being by means of tallies.

In the reign of Charles II. large amounts were borrowed from the goldsmiths, who performed many of the functions that are exercised by bankers at the present time. The King would send for the goldsmiths and tell them that he required certain sums of money. He would ask how much they could lend him, and one man would say he would be able to lend perhaps £10,000, and another that he could lend £50,000, and each contributed to make up the necessary amount. Then, as carefully as possible, these gentlemen hinted at something in the nature of a security, and he would mention certain taxes. Then the question of interest would come up, and in one particular interview, which I take from Mr. MacLeod's valuable book "The Theory and Practice of Banking" the goldsmiths pointed out that they paid their depositors 6 per cent., and therefore hoped that the King would be able to see his way to allow them 8 per cent., but on careful consideration they thought it best to leave it to his sense of generosity.

The account does not tell us how far his generosity extended.

As already mentioned, the general method of borrowing in the 17th century was by means of tallies. The following

description of tallies is taken from Parliamentary Paper, 366—I. of 1869—on Public Income and Expenditure :

“ Exchequer tallies were of two kinds
 “ —(I.) Tallies of Sol; (II.) Tallies of
 “ Pro.

“ I. Tallies of Sol were acknowledg-
 “ ments of the receipt of money into the
 “ Exchequer. They derived their name
 “ from the first word in the entry of the
 “ pell or receipt, showing that the money
 “ for which the tally was an acknowledg-
 “ ment had been actually paid (*solutum*)
 “ into the Exchequer, the tally thus serv-
 “ ing as a legal acquittance for the same.
 “ The tally was a willow stick not
 “ exceeding five feet in length, about
 “ one inch in depth and thickness with
 “ the four sides roughly squared. On
 “ one of the four sides the amount was
 “ expressed in notches. On each of the
 “ two sides next the notched side the
 “ description of the payment was written.
 “ The stick was split in half through
 “ the notches—one half constituting the
 “ tally was given to the person making
 “ the payment into the Exchequer, the
 “ other half, the counter tally, or coun-
 “ terfoil, was kept at the Exchequer as a
 “ check.

“ The following copy represents the
 “ exact size of a section of the end of an
 “ Exchequer tally, acknowledging the
 “ receipt of £236. 4s. 3½d. on 25th
 “ October, 1739, from Edward Ironside,
 “ Esq., as a loan to the King on £3 per
 “ cent. Annuities payable out of the
 “ Sinking Fund on account of £500,000
 “ granted per Act 11 Geo. 2, c. 27 :

“ This date was written upon the upper
 “ side of the tally, where the two notches
 “ denoting £200 are cut. The lower

De Edmo Ironside & son R. q. m. ch. d. 4s. 3½d. on 25th Oct. 1739. from Edward Ironside, Esq. as a loan to the King on £3 per cent. Annuities payable out of the Sinking Fund on account of £500,000 granted per Act 11 Geo. 2, c. 27.

Mucht alle die Octobr. 25. 1739. R. R. Georg. Sedi. Conc.

May 1741.

“ side, on which the smaller notches are cut, has only the
 “ word Sol written upon it. There was no single notch for a
 “ larger sum than £1,000; a notch of the gauged width of
 “ $1\frac{1}{2}$ inches denoted £1,000; 1 inch £100; $\frac{3}{8}$ inch £10; and a
 “ half notch of this last size £1; of $\frac{3}{16}$ inch 1s.; and the
 “ smallest notch 1d.; one halfpenny was denoted by a small
 “ rounded hole. A single cut of a notch signified half the
 “ amount.

“ II. Tallies of Pro were instruments of payment and
 “ operated as a modern cheque on a banker, being given forth
 “ in payment from the Exchequer as a charge upon some
 “ public accountant for him to pay the sum expressed thereon
 “ out of the revenues in his hands before they should reach
 “ the Exchequer. The tally afterwards served as a voucher,
 “ for which he had credit upon his account at the Exchequer
 “ of Account, in like manner as if for money actually paid by
 “ him with the Exchequer of Receipt.

“ The Tally of Pro received its name from the inscription
 “ on the tally, showing that it was struck Pro (for the benefit
 “ of) the person named. The amounts of these tallies of Pro
 “ when issued were entered not only as expenditure, but
 “ also as so much receipt under the head of revenue, on which
 “ they were charged, just as if the money thus assigned by
 “ tally had previously been actually paid to the officers of
 “ the Exchequer, although its receipt was in fact merely
 “ anticipated, the legal right to it being transferred to the
 “ bearer of the tally. Thus these tallies were also called
 “ Tallies of Assignment or of Anticipation.”

Tallies of Sol were issued when loans were raised from
 the public, and were acknowledgments of money actually
 received. Tallies of Pro were issued when loans were not
 forthcoming from the public, and were in lieu of cash for the
 payment of current services. Tallies were not abolished
 until 1783.

Many countries at the present time, in borrowing find it
 necessary to hypothecate certain taxes as security for the loan.
 China is an instance of this. In the early days this country also
 borrowed in the same way, generally by means of tallies
 which were payable from the product of certain taxes set
 aside for that purpose. Frequently these taxes did not yield
 the amount anticipated and the interest fell into arrears. In
 1696 the deficiency of the funds upon which the tallies were

charged was over £5,000,000, although the total amount borrowed was only £14,000,000. Consequently these tallies fell to a considerable discount. In The First General Mortgage Act [8 and 9 William III., c. 20] the preamble recites that "By reason of the non-payment of tallies the owners are frequently necessitated to sell and dispose thereof at great loss at an excessive discount whereof the public credit is very much prejudiced."

Tallies, in theory at least, were repayable within short periods, but under the strain of expenditure caused by the continuous wars in the early years of the reign of William and Mary, the method quite broke down. It became obvious that the revenue of the year could not be made to cover the year's expenditure without inflicting great hardships on the people, and this necessitated spreading the expenditure over longer periods. The method of borrowing for long periods was therefore instituted, and this developed naturally into borrowing in perpetuity. What is called the "Funded Debt" dates from this period.

In the National Debt Return which is presented to the House of Commons each year the Debt is set out under four heads :

1. Funded Debt.
2. Terminable Annuities.
3. Unfunded Debt.
4. Other Capital Liabilities;

and as each of these headings has distinguishing features they must be considered separately.

FUNDED DEBT.

There is considerable difficulty in deciding what was the real origin of the Funded Debt. It is generally referred to as the loan of £1,000,000 which was raised in 1692 under the authority of the Act 3 and 4 Wm. and M. c. 3, and known as the first English tontine. The plan of this tontine was that every subscriber of £100 should have the right to nominate one person, of any age, and in return for his £100, he would receive 10 per cent. during the first seven years, whether the nominee was alive or dead. At the end of those seven years £70,000 per annum was to be divided amongst

the survivors, who would thus get an increasing annual income. This was to go on until there were only seven left, and then they had £10,000 each. After that time the benefit of survivorship was to cease. For the original £100, if a man fortunately lived to a good age he eventually was in receipt of £10,000 a year, but that considerable sum having been reached, the annuity thereafter remained constant during his lifetime. Although this certainly would appear at the present time to be a most attractive scheme, it is curious that only £108,100 was subscribed. The scheme was carried out in proportion to the smaller sum. The ill-success of the tontine was probably due to the fact that subscribers were given the alternative of taking single life annuities at the rate of 14 per cent., regardless of age or sex, and this proved much more popular, the balance of the £1,000,000 being subscribed in this form. Probably in order to raise a further sum of money, these life-annuities were exchanged for annuities-certain having a term of 96 years from 25th January, 1695. The amount payable for such conversion was four and a half to five years' purchase, *i.e.*, from £63 to £70. The fact that all the annuities were converted points to the conclusion that the original annuities were all granted on old lives, as the difference in value between an annuity on a young life and one for a long term is not so great as four and a half to five years' purchase.

In 1694 the Bank of England was founded, and, as you know, its original capital was lent to the Government. That loan is still in existence, and therefore should be regarded as the origin of the present existing Funded Debt, for it was the first considerable loan for which no provision whatever was made for repayment. From time to time the Bank of England increased its capital, and for a good many years nearly the whole of it was lent to the Government.

I ought to explain here the origin of the word "funds." When loans were raised on the security of taxes it was usual to pay those taxes into a certain fund, from which the interest was drawn. As it became more common to issue loans for an indefinite period there arose some confusion with regard to the word "fund," and though originally when people said, "I have a share in the fund," they meant the fund from which the interest was paid on their perpetual

annuities, yet the reference at the present time and for many years past has been rather to the capital amount.

In 1694 the first lottery loan was issued. These lottery loans, as you will see, became very common, and therefore it would be as well to consider them briefly. The first one was issued in the year in which the Bank of England was founded, and was for £1,000,000. There were 100,000 shares of £10 each. 97,500 of them were to draw blanks, and they were to receive £1 a year for sixteen years, a 6 per cent. investment. The remaining 2,500 prize winners were to have £42,500 per annum distributed amongst them for sixteen years, and the fortunate drawer of the first prize was to receive £1,000 a year for sixteen years. For £10 you might only receive £1 a year for sixteen years, but on the other hand you might possibly receive £1,000 a year for sixteen years. The £10 shares were payable by contributions spread over a good many months, and as an inducement to pay up the instalments a discount was allowed of 14 per cent. You might imagine that these lottery loans being payable for sixteen years would more correctly come under the heading of annuities-certain, but what is referred to in the Government Blue Books as annuities-certain are quite different from these, and were of much later date, and I am keeping as nearly as possible to the official classification.

There was another lottery loan in 1697 for £1,400,000, which was not nearly so successful. So far as I can find out, the reason was that at that time the Government had a considerable number of creditors, and instead of paying them in cash they tried to induce them to accept these lottery tickets.

The example set by the Government in regard to lotteries was soon followed by a number of other people, and in 1699 the large number of private lotteries became such an intolerable nuisance that it was found advisable to pass an Act prohibiting them entirely. In view of the fact that the Government had first started the lotteries and found it necessary to resume the raising of loans by this method in 1710, it is rather curious to read the first words of this Act: "Whereas, several evilly
"disposed persons for divers years last past have set up many
"mischievous and unlawful games called lotteries, not only in
"the cities of London and Westminster and the suburbs and
"places adjoining, but in most of the eminent towns and

“ places in England and in the Dominion of Wales, and have
 “ thereby most unjustly and fraudulently got to themselves
 “ great sums of money from the children and servants of
 “ various gentlemen, . . . and therefore it is advisable that
 “ the thing should be absolutely stopped” This quite
 ignores the fact that the Government had been the biggest
 sinners in the matter.

In 1698 the new East India Company was founded. The original East India Company had been formed in the reign of Elizabeth, and in 1702, the two companies, the old and the new, were amalgamated. The company which was formed in 1698 started in very much the same way as the Bank of England, that is to say, its capital was all lent to the Government, and therefore formed another portion of the funded debt.

I will now give you a short account of a debt contracted in 1672, known as the “ Bankers’ Debt,” and settlement of which was deferred until 1705. From one point of view this transaction might have been considered as the commencement of the funded debt, because it originated first, viz., in 1672. It was not, however, admitted as a debt until 1705 as stated above.

In 1672 Charles II. found himself very hard pressed and consequently very anxious to raise money. How great his difficulties were may be judged from the fact that he offered the position of Treasurer to anyone who could manage to “ raise the wind ” for him. Eventually Shaftesbury discovered a method, but, as sometimes does happen, another gentleman, Clifford, got the credit for it, and obtained as reward not only the Treasurership, but also a peerage. The plan suggested was simplicity itself. In those days goldsmiths, as I have said, acted as bankers. People deposited money with them, and they kept it in the safest place they could think of, which was at that time the Exchequer. At one time I believe the Exchequer was at Westminster, but I am not quite sure of its situation at the time of which we are speaking. However, it did not prove a safe place for the goldsmiths, because the plan suggested by the King’s friends was simply to close the Exchequer. This was done, and interest at 6 per cent. was promised, but not paid. When the public realized the fraud that had been perpetrated, they were in consternation. Merchants were ruined and widows and orphans

reduced to the utmost poverty, for in those days there was nothing like the same opportunity for investment that there is to-day, and a large proportion of the money deposited was what we should now call trust funds. There was a very great hue and cry, but it did not appear to affect Charles very much. At the end of four years the clamour became so great that he went so far as to say the accounts ought to be looked into. When that was done—and it took about another year—he said that 6 per cent. should be paid as originally promised. The 6 per cent. on the loan was paid for six years, and then ceased, and during the last year of his reign nothing was paid. Then came James II., who never even considered the matter at all. In the second year of William and Mary, 1689, the creditors made further endeavours to get this debt acknowledged, and much expensive litigation followed with varying results. The claim was resisted on the ground that it was a personal debt of the Crown and not a debt of the Government. In 1700 the creditors eventually won their case absolutely and the debt was admitted. Starting from 1705 the Government agreed to pay 3 per cent. on the capital, but reserved to themselves the right to discharge the whole of the debt at any time on payment of one-half of the capital. Seeing that the rate of interest at that time was probably about 7 or 8 per cent. the rate allowed was not too liberal. What really happened was that £1,328,526 had been stolen from the people in the most barefaced manner, and kept for thirty-three years. The only restitution made was that for six years 6 per cent. was paid and at the end of thirty-three years half the debt was acknowledged and interest on this sum continued at 6 per cent.

By various borrowings the funded debt in 1711 had risen to £11,750,000.

In 1712 the famous South Sea Company started, and it is impossible to explain the history of the National Debt without saying something about that Company. In 1710 the temporary borrowings in anticipation of revenue and other debts for which no regular provision had been made amounted to about £9,000,000, and it was arranged that this debt should be made permanent in the following manner. An Act was passed establishing the South Sea Company, and giving it the privilege of carrying on the trade to the South Seas.

The Company in return for this privilege was to take over the Unfunded Debt of £9,000,000, and to do this they issued their stock in exchange either for cash or Government obligations. By these means the Company became possessed of the whole of the £9,000,000 of Unfunded Debt as well as a large amount of cash. The temporary duties on wine, beer, tobacco, &c., were to be made permanent, and to form a fund out of which 6 per cent. interest was to be paid to the Company on the Debt of £9,000,000. If there was a deficit it was to be made up by Parliament, and if there was a surplus it was to be applied in reduction of the amount owing, but as repayment was to be made only at the option of the Government, the Debt became funded. In addition, the Company was to have £8,000 a year for the management of the Debt. The Company was successfully floated, and in 1715 its capital was increased to £10,000,000, by the capitalisation of arrears of interest and by the funding of sundry Government minor debts. In 1719 the capital was further increased by certain lottery annuities being funded and by a further loan to the Government. It was in 1720 that the great scheme was propounded by which the whole of the debts of the State, amounting to £31,000,000, were to be discharged by reducing all the funds into one under the control of the South Sea Company. The South Sea Company offered to take over the whole of the National Debt if the Government would pay them 5 per cent. interest for 7 years and 4 per cent. thereafter, and the Company was to settle with the stockholders. It is a little difficult to understand why the Company was so anxious to undertake this business, but apparently they foresaw that a gigantic boom of their own stock would thereby be facilitated. Whatever may have been the advantage anticipated, it is certain that the Company considered it of very great value, and they offered £3,500,000 in cash to the Government for the privilege. The Bank of England at once recognised the danger to their own position and offered to pay £5,000,000, whereupon the Company, after a few days' delay, increased their offer to £7,500,000. The Bank then made some further offer, but eventually the South Sea Company's scheme was accepted. No sooner was this known than the South Sea Stock shot up to a tremendous premium. On April 7th, 1720, when the Bill passed, it stood at £300. On the 12th the Directors

opened their first subscription for £1,000,000 at £300 for each £100 Stock, having first paved the way by lying tales as to the enormous advantages that they had gained by their exclusive trading privileges in the South Seas. By the 2nd June the price had gone to £890, and shortly afterwards it went to £1,000. The second subscription filled equally well, and so high was the price of the Stock that the third subscription was floated at £1,000 for each £100 Stock. £4,000,000 was taken at this price and the Stock went to £2,000. By this time the bubble was at its height and the mania for speculation had spread to all kinds of mad ventures. The *London Journal* for the 11th June, 1720, says: "The hurry of our stock-jobbing bubblers has been so great this week, that it has exceeded all that was ever known. There has been nothing but running about from one coffee house to another, and from one tavern to another, to subscribe without examining what the proposals were. The general cry has been, 'For G——'s sake let us but subscribe to something, we don't care what it is.' So that in short many have taken them at their words, and entered them adventurers in some of the grossest cheats and improbable undertakings that ever the world heard of; and yet, by all these, the projectors have got money, and have had their subscriptions full as soon as desired." The most extraordinary schemes were floated and eagerly taken up. One was "Puckle's Machine Company", for "discharging round and square cannon balls and bullets and making a total revolution in the art of war." Another ingenious fraud was the "Globe Permits," which were pieces of card with the Globe Tavern impressed thereon in wax and inscribed "Sail Cloth Permits." The possession of a card entitled the holder at some future time to subscribe to a Sail Cloth Company, and the price was 60 guineas each. One scheme was for the discovery of perpetual motion. Two others, the audacity of which is enough to take one's breath away, were, "A promising design hereafter to be promulgated", and "A company for carrying on an undertaking but nobody to know what it is." The promoter of the last company obtained £2,000, which represented deposits of £2 per cent. on a capital of £100,000, in five hours, and then disappeared. Deposits of 1s. and 6d. per £100 were often asked, and in one case it fell as low as 1s. per £1,000 Stock. All the companies

were not frauds, however, for among those established during this mania were two which are in existence at the present time, viz., the London Assurance Corporation and the Royal Exchange Assurance. By the 2nd September the collapse came, and South Sea Stock had fallen to £700; by the 13th it had fallen to £400 in spite of the strenuous efforts of the Directors, who promised that the Christmas dividend should be 60 per cent., and guaranteed dividends of 50 per cent. for 12 years. The immediate cause of the collapse was that the South Sea Company got jealous of its rivals and commenced legal proceedings which were successful, and this caused a panic among the bubble promoters. When the legal proceedings started the South Sea Stock was at £850, and by the 29th September it was down to £175. In the wreckage and ruin the Bank of England stood alone as the only support of credit, and it was to them, on the intervention of Sir Robert Walpole, that the South Sea Company applied. An agreement was drafted but was abandoned, and finally, in order to support public credit, the Bank were permitted to increase their capital by £4,000,000, to be issued in exchange for a similar amount of South Sea Stock, the Government undertaking to pay the Bank 5 per cent. on such amount. This reduced the South Sea Stock from £37,000,000 to £33,000,000. The £7,500,000 which the South Sea Company had agreed to pay the Government was remitted. As regards the remaining £33,000,000 of capital, the Government agreed to exchange one half of it for Government Stock known as the Old South Sea Annuities, yielding 5 per cent. until 1727, and 4 per cent. thereafter. The other half remained, and represented trading capital of the Company, but I do not think they ever did trade. In 1733 a further £11,000,000 of capital was exchanged for the Government New South Sea Annuities, yielding 4 per cent., but the last of the capital stock did not finally disappear until 1853.

The first issue of 3 per cent. stock was made in 1726, when £1,000,000 was issued at par in the usual form of £10 lottery tickets. Whether it was a rebound from the speculative mania during the South Sea Bubble I cannot say, but I feel inclined to think it was, because I imagine that after a wild period such as that, people would be suspicious of any kind of speculation for many years. It is certainly remarkable that by 1739 the credit of the Government had so risen that

the 3 per cent. Stock was selling at 107 per cent. At this date the amount of the funded debt was £43,000,000.

In 1749 the first conversion of any importance took place—Mr. Pelham's conversion. Probably this would have taken place earlier if war had not intervened, but by 1749 the Austrian war was at an end and credit was standing very well, and therefore it was thought a convenient time to reduce the rate of interest. In 1749 the funded and unfunded debt amounted to £78,293,313 of which three-fourths bore interest at 4 per cent. The 3½ per cent. and 4 per cent. rose above par after the war and the 3 per cent. stood at par. Mr. Pelham's proposal was that the holders of 4 per cent. Stocks amounting to £57,703,475 were to have 4 per cent. until 25th December, 1750, 3½ per cent. from that date to 25th December, 1757, and 3 per cent. thereafter. The new Stock was not to be liable to redemption until 1757. The Debt of £57,703,475 included :

- (1) Various Annuities raised by means of the lottery loans at 4 per cent.
- (2) South Sea Annuities and South Sea Stock.
- (3) East India Debt.
- (4) Bank of England Debt.
- (5) A small amount of annuities issued in 1720 on the security of the Plate Duties.

A very small amount of enthusiasm was displayed by the holders at first, but owing to the judicious issue of pamphlets a more favourable view was eventually taken, and at the end of the period allowed for conversion (three months), nearly £39,000,000 had been accepted at the terms. An extension of time with less favourable terms was then granted, and as a result applications for the exchange of a further £15,500,000 were received. The rest of this stock, viz., £3,250,000 was paid off at par partly by raising a new loan at 3 per cent. and partly by means of exchequer bills. After the automatic reduction of interest in 1757 the stock became known as the Reduced 3 per cent., and continued in existence right down to Mr. Goschen's conversion in 1888.

In the year 1752 various 3 per cent. annuities which had been issued at different times, some in connection with lottery loans and others charged on the sinking fund, were consolidated into one joint stock, called the Consolidated 3 per cent. Annuities. This is the origin of our present "Consols." The

amount of the "Consolidated 3 per cents." at that date stood at £9,137,821. 5s. 1½d. This ½d. was carried forward from year to year until 1855, a period of a hundred and three years, and was then cancelled by some unknown person who struck his pen through it.

In 1766 the second English Tontine was floated in conjunction with a lottery loan and a loan on perpetual annuities. As in the first Tontine there were no regulations as to age. The flotation was a failure, only £18,000 being subscribed.

In 1789 the third English Tontine was set on foot, and this was much more scientifically arranged. The contributors were divided into six classes, but in this case the classes were separated according to age. Each class was to have benefit of survivorship until the share amounted to £1,000. The classes and annuities were arranged as follows :—

Class	—	Annuity
1	Under 20 years of age	£ s. d. 4 3 0 per annum.
2	From 20 to 30 years of age	4 5 6 „
3	„ 30 to 40 „	4 8 6 „
4	„ 40 to 50 „	4 13 6 „
5	„ 50 to 60 „	5 1 6 „
6	„ 60 years of age upwards	5 12 0 „

Generous as these terms seem, there was a large number of persons who became dissatisfied with their bargain, and these were allowed to contract out of the scheme, receiving in exchange long annuities for 69½ years. In order to keep faith with those subscribers who remained in, Government officials were nominated in place of the lives withdrawing so that the order of survivorship should not be disturbed.

Reference may here be made to the three Irish Tontines, which, unlike the English Tontines, were successfully carried out. The first took place in 1773. £265,000 Irish currency was raised in sums of £100 at 6 per cent. interest with benefit of survivorship. The lives were divided into three classes :

- (1) Lives of 40 and upwards.
- (2) Lives between 20 and 40.
- (3) Lives under 20.

There was a stipulation that no higher annuity than the amount of the subscription (viz., £100), was to be paid. The three classes became extinct :

- | | |
|-----------|---|
| (1) 1823, | the last survivor being aged 90 at death. |
| (2) 1851 | " " 99 " |
| (3) 1863 | " " 91 " |

The second Irish Tontine was established in 1775, the rate of interest and the arrangement of classes being as in the first Tontine. There was, however, one important exception, inasmuch as the entire interest on the sum advanced was to be paid to the survivors in each class without restriction as to the amount of the subscription. The three classes in this Tontine expired in (1) 1822, age 89; (2) 1855, age 99; (3) 1866, age 93.

The third Irish Tontine was floated in 1777, interest at $7\frac{1}{2}\%$ being allowed. In other respects the conditions were precisely similar to the second Tontine. The three classes became extinct in (1) 1832, age 94; (2) 1854, age 97; (3) 1870, age 94. The survivor in the last class received a half-year's annuity at the rate of £15,830 per annum.

In view of the recent Old Age Pensions Act, it is instructive to note that the Committee appointed in 1811 reported that owing to the laxity of management many payments of annuities had been made long after the annuitants had died.

A few words may be said as to the debt in Ireland. This started in 1716 with a loan of £50,000 at 8 per cent. for the support and defence of the kingdom. Interest was to be allowed until such time as the debt should be repaid. The form of the security was a Treasury receipt, which, however, could be transferred by endorsement. The interest was afterwards reduced to 7 and then 6 per cent. The next item of debt was £150,000 borrowed in 1730 at 6 per cent., partly by subscription and partly by funding Army Debentures which had been issued for arrears of pay. In 1731 the form of security was altered into debentures which were duly numbered. New duties were appropriated to pay the interest and, so often as there remained a surplus of £5,000, the debentures also, which were drawn by lot. The funded debt was increased from time to time, nearly always by means of debentures, until 1797, when the holders were given the option

to change them for Government Stock inscribed in the books of the Bank of Ireland. Many preferred to retain the debentures, however, and consequently these still continued in existence until they were either converted or paid off by the conversion schemes of 1822, 1824, and 1844.

I have already referred to the Tontines, and I need say no more as to these.

As regards lottery loans, these were issued separately in Ireland up to the date of the Union only. In two of these lotteries the prizes were given in the form of 4 per cent. debentures.

In 1781 the Bank of Ireland was formed in a similar manner to the Bank of England, by a loan of £600,000 in 4 per cent. debentures at par. This was afterwards converted into Bank Stock, with an annuity of £24,000. The capital was further increased by a loan of £500,000 to the Government at 5 per cent. in 1797, the interest on the original loan being also raised to the same figure. By further loans in 1808 and 1821 the debt was increased to £2,850,000 (£2,630,769. 4s. 8d. British currency), at which figure it now stands.

I must explain that the loans were contracted in Irish currency. As nearly as possible 13*d.* Irish equalled 12*d.* English, the currencies not being assimilated until 1826.

By various borrowing, for the most part in debentures, the debt of Ireland increased to £107,000,000 in 1817, in which year the debts of Great Britain and Ireland were consolidated into the National Debt of the United Kingdom. The necessity for the consolidation was owing to the rapid increase in the Irish debt. The Act of Union, 1801, provided that Ireland should bear two-seventeenths of the total annual expenditures. At the time of the Union the Irish debt was one-fourteenth of that of Great Britain, but in 1817 it had increased to one-sixth, and considerable doubt had been expressed as to whether under the terms of the Act of Union the Imperial Parliament had power to continue raising further debt for Ireland. The Irish Exchequer was abolished by the Act consolidating the debts and became merged in the Exchequer for the United Kingdom.

In spite of the strong wording of the Act of 1699, we find the Government in 1710 again resorting to lotteries as a means of raising money, and the method was continued right down to 1823. The Lottery Act of 1710 also contained

stringent provisions for suppressing all lotteries (other than State lotteries) as well as various insurance offices mentioned in the Act. Of course it was quite impossible to stop private lotteries while the State continued to raise money by the same means, and in spite of the restrictions being made stronger and stronger, they continued to flourish. In 1772 Mr. J. Francis (to whose History of the Bank of England I have already referred), in his "Chronicles and Characters of the Stock Exchange," says :—

" In 1772 lottery magazine proprietors, lottery tailors, " lottery staymakers, lottery glovers, lottery hatters, lottery " tea merchants, lottery snuff and tobacco merchants, lottery " barbers (where a man for being shaved and paying 3*d.* " stood a chance of receiving £10), lottery shoeblacks, lottery " eating houses (where for 6*d.* a plate of meat and the chance " of 60 guineas were given), lottery oyster stalls (where 3*d.* " gave a supply of oysters and a remote chance of 5 guineas) " were plentiful; and, to complete a catalogue which speaks " volumes, at a sausage stall in a narrow alley was the " important information written up that for one farthing's- " worth of sausage the fortunate purchaser might realise a " fortune of five shillings. In short, every adventurer " who could collect a few articles advertised a lottery."

As nearly everything to do with business or finance included some form of lottery it is little wonder that gambling on human lives became common, and as a consequence an Act dealing with insurable interest, and known as the Gambling Act, was passed in 1774, which still remains in force. Act after Act was passed with the object of stamping out private lotteries, but without effect. In 1808 a Parliamentary Commission, after stating that it is impossible to conduct State lotteries and at the same time purify private lotteries, went on to say that :—

" In the meantime your Committee find that by the effects " of the lottery, even under its present restrictions, idleness, " dissipation and poverty are increased, the most sacred " and confidential trusts are betrayed, domestic comfort is " destroyed, madness often created, crimes, subjecting the " perpetrators of them to the punishment of death, are com- " mitted, and even suicide itself is produced, as will fully " appear by the evidence submitted to the House. Such " have been the constant and fatal attendants upon State

“ lotteries, and such your Committee have too good ground to
 “ fear will be their invariable attendants so long as they are
 “ suffered under whatever checks or regulations they exist.”

In spite of this scathing denunciation, lottery loans to the extent of nearly a million a year continued to be floated, until they finally ceased in 1823. In some cases money prizes were given, and in others the prizes were given in stock and annuities for terms of years and lives.

I now come to the subject of Pitt's Sinking Fund. In 1786 the first real attempt to institute a permanent sinking fund for the redemption of the debt was made, and it will be convenient at this stage to take a general survey of the National Debt at this time. Excluding the unfunded debt, there were no less than eleven different descriptions of stock listed. They were :

	£	s.	d.
Debt due to the Bank of England	11,686,800	0	0
„ „ East India Company	4,200,000	0	0
3 % Bank Annuities, 1726	1,000,000	0	0
South Sea Stock	3,662,784	8	6½
Old South Sea Annuities 3 %	11,907,470	2	7
New South Sea Annuities 3 %	8,494,830	2	10
South Sea Annuities, 1751, 3 %	1,919,600	0	0
Consolidated Annuities 3 %	107,399,696	5	1¼
Reduced Annuities 3 %	37,340,073	16	4
Consolidated Annuities 4 %	32,750,000	0	0
Consolidated Annuities 5 %	17,869,993	9	10
	<hr/>		
	£238,231,248	5	2¾
	<hr/>		

The total funded debt was thus £238,231,248. The Bank Stock and the East India Stock require no explanation, nor do the four different South Sea Stocks. The Consolidated 3 per cent. and the Reduced 3 per cent., as I have already mentioned, were formed in 1750-2. The Bank Annuities, 1726, were first added to the National Debt in 1786. They were originally secured on a duty of 6*d.* in the £ on pensions, but were afterwards paid from the Consolidated Fund, and by various means were extinguished by 1853. The Consolidated 4 per cent. originated in 1777 at the time of the American war, when a loan of £5,000,000 was raised at

4 per cent. In 1780 a further £12,000,000 was raised. Further issues of this Stock raised the amount to £32,750,000 in 1786.

The Consolidated 5 per cent. Annuities were first known as the Navy 5 per cent., owing to their having originated in the funding of the Navy Victualling and Transport Bills, although Exchequer Bills and ordinary debentures were also funded in this Stock.

It must be remembered that up to this time all the Stock created had been borrowed on the security of certain funds, consisting of the products of various taxes and duties which were assigned to them. Up to 1716 the loans were secured on particular taxes or duties, but in that year three main funds were constituted :

- (1) The General Fund ;
- (2) The Aggregate Fund ;
- (3) The South Sea Fund.

To these funds were carried all the taxes and duties which had been appropriated to the payment of the interest on the debt. The surplus was to be utilized in reducing the debt, and, indeed, was so applied, but I will make further reference to this a little later. Although this was a convenient method of dealing with the debt when it was instituted, by 1786 the country had outgrown it, and the cost of administration and the intricacies involved in charging the duties made it evident that a change was necessary. This change was effected in 1786 by Mr. Pitt, who pointed out that the credit of this country was bound up in the payment of the whole debt and that the supposed priority of claim on certain funds was more apparent than real. The three funds, or rather four funds, since the surplus was carried to a sinking fund, were abolished, and it was enacted that the whole of the revenue was to be carried to one fund called the Consolidated Fund, and all charges were to be issued out of such fund. From that time forward the priority of the various debts ceased, but the amount required for the service of the debt forms a first charge on the Consolidated Fund.

I have already referred to the Sinking Fund established in 1714 by means of the surpluses of the General, Aggregate, and South Sea Funds, and this is interesting as being the first

of the attempts to reduce the debt. The fund was the means of paying off about £6,000,000 of debt by 1733. The same year, however, saw the first raiding of the Sinking Fund by Sir Robert Walpole, who had been called its father.

In referring to this fact in the Commons, Mr. William Pulteney said: "If Solomon's judgment was right, he who is "thus for splitting and dividing the child can never be deemed "the true father."

Others abused him in unmeasured terms, saying that he was erecting for himself a "monument of infamy, and bringing down on himself the curses of posterity."

In 1786 Mr. Pitt took the matter in hand and set up a new Sinking Fund.

The most extraordinary thing about these Sinking Funds is that for some unknown reason the idea had become prevalent that it was a distinct advantage to maintain a Sinking Fund, even if further borrowing were necessary for the purpose. It is quite possible that for diplomatic reasons such a course may at times be advantageous, but Dr. Price, in 1772, actually claimed to prove mathematically that the system must result in an immense gain to the State. However anybody in his senses could have admitted such an absurd contention is difficult to imagine, but as the plan was actually adopted for many years it may be interesting to set out what Dr. Price's arguments were. They were published in a fair sized volume, and put shortly were somewhat as follows: He said there are three ways in which a Sinking Fund can be used:

- (1) Stock purchased by means of the Sinking Fund may be kept in force, and the interest received thereon applied to additional purchases.
- (2) The stock purchased by Sinking Fund may be cancelled and the interest thus saved applied to current expenditure instead of additional purchases.
- (3) The interest saved on the purchased stock as above may be applied to cancelling of the taxes which previously provided such interest, that is to say, as less interest becomes payable so less taxes may be imposed.

The first he described as the compound interest method, the second as the simple interest method, and the third as abolishing the operation of interest altogether.

He very strenuously advocated the first, and gave the following comparison between the first and second methods :

Sinking Fund £200,000 per annum. Interest 5 per cent.—

Annuity set free 1st year . . .	£10,000
„ „ „ 2nd year . . .	20,500
etc. etc.	

By the 86th year the amount of annuity set free would be £13,083,000, which, together with the original sinking fund of £200,000, would make a total of £13,283,000. This, he pointed out, was equivalent to the necessary annual service on a debt of about £262,000,000.

Now taking the second method by which the interest instead of being applied to the reduction of the debt was applied to the ordinary services of the State, the interest released each year would be £10,000, and at the end of 86 years the interest released would amount to £860,000, representing £17,200,000 Stock. In addition to this there would be the interest saved by applying the disengaged interest in the current services which would otherwise have had to be raised by new loans. These loans at the beginning of the 86th year would amount to £36,550,000. The debt discharged or averted by this method would be :

£36,550,000 plus £17,200,000 = £53,750,000

Debt discharged by method (1) = 262,000,000

Net loss to State £208,250,000

It is difficult to imagine how such a muddle of figures could ever have deceived anyone. The fallacy lies simply in the fact that no account is taken of the interest which has to be paid on the money borrowed for the purpose of providing a cumulative fund instead of a constant sinking fund of £200,000 per annum. That this was his absurd blunder is also apparent from the way in which he insisted that the Sinking Fund should not be suspended in war time. He said : “ War will increase the efficacy of the Fund as it will “ be making its quickest progress at that time, and it would “ be the State’s advantage to borrow at the same or even a “ higher rate since it is borrowing at simple interest and “ improving it at compound interest.”

It cannot be supposed that such an astute Chancellor as Mr. Pitt could have been deceived by Dr. Price’s fallacies,

and it is only fair to state that in 1828 Mr. Goulburn, who was then Chancellor, stated that the principle of borrowing money in order to support the Sinking Fund was not contemplated, but that he (Mr. Pitt) felt that the one sure method of reducing debt was to apply surplus revenue only. The long and expensive French wars, however, prevented him carrying out his original intentions, and as the lesser of two evils he decided to borrow money rather than abolish the Sinking Fund.

The main provisions of Mr. Pitt's plan in 1786 were as follows:

£250,000 was to be set aside quarterly out of the surpluses of the Sinking Fund, any deficiency to be charged on the surplus of the succeeding quarter, and at the end of the year the total deficiency to be made good out of the supplies for the year. This £1,000,000 per annum was to be applied in purchasing Stock, which was to be transferred to the Commissioners, who were to hold it and receive dividends in the ordinary way. The dividends so received were to be applied similarly in purchase of Stock, so that the annual available sum for purchasing Stock would increase at compound interest. In addition to this it was provided that all life annuities and annuities for terms of years as they fell in were to be continued to the Commissioners. This compounding was to be continued until the total annual sum available was £4,000,000, after which time all Stock subsequently purchased was to be cancelled. It was also provided that in the case of Stock held by the Commissioners, the Bank of England was to receive nothing in respect of management expenses.

The purchases of Stock were to be made by the Commissioners on the transfer days in each quarter. Although this evidently injudicious provision was objected to by Mr. Charles James Fox, who pointed out that it would eventually result in raising the price on those days, his objections were overruled and the plan was strictly adhered to for over forty years. This is, I think, a sufficient description of what is known as Mr. Pitt's New Sinking Fund as originally instituted.

In 1792 it was enacted that a Sinking Fund of 1 per cent. should be set aside for all new debts unless some other provision should have been made for paying them

off within a period of 45 years. These 1 per cent. Sinking Funds were at first kept separate, but in 1802 were amalgamated with Mr. Pitt's Sinking Fund, and the limitation of £4,000,000 set up by that Act was abolished. The two Funds were to continue to accumulate until the whole debt was redeemed. By the 1786 Fund it was estimated that the debt which at that time amounted to £238,231,248 would be redeemed by 1813, and by the 1 per cent. Sinking Fund the other portion of the debt would be redeemed in forty-five years. By the amalgamation no relief was to be given to the taxpayer until the whole debt had been redeemed, and this would be some time later than 1813. You will readily appreciate how the burden of the debt service kept increasing year by year, for although the debt was being reduced the taxpayer still had to provide the interest on the total original debt, also on the debt that had been created after. In 1813 the Stock actually held by the Commissioners amounted to nearly £238,000,000, on which they were receiving full interest in addition to the various Sinking Funds. But at this time there was also £600,000,000 of Stock in the hands of the public, so that it can be readily understood that, notwithstanding Dr. Price's wonderful forecasts, the burden of taxation necessitated by this huge debt caused grave difficulty. The Chancellor of the Exchequer, Mr. Vansittart, therefore proposed that no increase in taxation should take place in the future until the annual service required for any necessary future borrowing should be equal to the interest paid to the Commissioners on Stock held by them. This really meant that every time a fresh loan was required the interest on such loan should be provided by cancelling a sufficient amount of Stock held by the Commissioners.

It must not be imagined that Mr. Vansittart for one moment suggested giving up the wonderful idea of borrowing in order to keep up the Sinking Fund as suggested by Dr. Price. His proposal merely amounted to making, as it were, a fresh start, and in order to prove himself a true disciple of Dr. Price he provided for certain increases in the Sinking Fund, and Stock continued to be purchased by the Commissioners at the same time that it was being cancelled.

In 1823 all the Stock then standing in the names of the Commissioners was directed to be cancelled. The total amount of Stock purchased by the Commissioners up to 5th April,

1823, was over £440,000,000, the price paid averaging £66. 5s. 9d. per cent. At this time the annual sum handed over to the Commissioners amounted to between £15,000,000 and £16,000,000, and by the Sinking Fund Act of 1823 this amount was reduced to £5,000,000. The principle of accumulating the interest was still retained but in a modified form, it being provided that when the interest on the Stock standing in the names of the Commissioners should amount to 1 per cent. of the total funded debt, and such portion of the unfunded debt as had not been provided for, all Stock in excess should be cancelled at such times as Parliament should direct. This continued until 1829, when the whole fatuous system originated by Dr. Price was swept away, and the common-sense method of applying the realized surplus of income over expenditure was substituted.

In 1829, when this method was done away with, what is known as the Old Sinking Fund was started. The absurdity of the old method had been repeatedly pointed out more particularly by Dr. Hamilton. Mr. Hume also introduced resolutions in the House of Commons in 1822. He was very insistent that a State would do far better to cancel the Stock purchased by the Sinking Fund at once than to accumulate dividends thereon. He also pointed out the tremendous loss incurred by the State in borrowing for the purpose of the Sinking Fund at a higher rate of interest than that at which the Sinking Fund purchases were made, or, as was pointed out by Mr. Grenfell, selling new Stock cheap in order to buy old Stock dear. Although Mr. Hume's resolutions were not carried, they led to the modification of the method in the next year, but it was not until 1829 that the cumbrous machinery was swept away owing to a strong report by a committee appointed to enquire into the public income and expenditure.

The main conclusions of this report were:—

- (1) That it was strongly advisable to apply surplus revenue in reduction of debt.
- (2) That by various savings and modifications it was hoped that in future years a surplus of £3,000,000 might be raised, and it was expedient in estimating the expenditure and revenue to keep such a surplus in view.
- (3) If, however, this surplus was not realized, the deficiency ought not to be supplied by borrowing.

- (4) That all Stock purchased should be at once cancelled.
- (5) That the surplus revenue could with profit be utilized in reducing the Unfunded Debt as well as the Funded Debt.
- (6) That the surplus revenue could with advantage be utilized in changing perpetual annuities into terminable annuities.

The Sinking Fund of 1829, now known as the Old Sinking Fund, and still in force, was based on the Committee's Report. To prevent fluctuations at the end of each quarter the revenue and expenditure for the preceding four quarters were to be made up, and a quarter of the surplus income thus disclosed was to be applied in reduction of the debt at any time in the ensuing quarter. The Committee's suggestion as to the application of the Sinking Fund to unfunded debt was adopted, and Deficiency Bills were included. The Act was repealed and re-enacted in 1866, at which time, you will remember, Deficiency Advances were substituted for Deficiency Bills, and the Commissioners were empowered to apply the Sinking Fund to repay Deficiency Advances.

Although the Committee expressed the opinion that a surplus of £3,000,000 should be budgetted for, in only one case was this done, namely, in 1829, but the surplus in that year only amounted to £1,750,000. Indeed, no serious effort appears to have been made to give effect to this particular recommendation, Chancellors finding that they would reap more popularity by reducing taxation rather than by reducing debt. Probably owing to the estimates up to 1874 not taking into account the automatic expansion of the revenue, the old Sinking Fund was responsible for a very considerable reduction in the debt. It will be remembered that in the financial year 1906-7 the old Sinking Fund amounted to £3,500,000, and to £5,250,000 in 1907-8, although the prospective increase in the revenue had been taken into account in estimating the income for each of those years.

FIFTH LECTURE.

The National Debt.

(Continued.)

YOU will remember that I finished my last lecture with some description of the Old Sinking Fund, and this evening I want to commence with a description of the New Sinking Fund, which was formed in 1875 by Sir Stafford Northcote. At that time the annual charge for interest and management of the National Debt amounted to £27,200,000, and it was proposed that this amount should be increased to £27,400,000 for the year 1875-6, to £27,700,000 for 1876-7, and to £28,000,000 in the following years. The surplus, after paying the interest and expenses of management, was to be applied in purchase of stock which was to be forthwith cancelled. The amount applicable to the reduction of debt would therefore increase each year by the reduction of the interest and management charges. The Old Sinking Fund was at the same time to be continued, and it was arranged that the surpluses should be ascertained at the end of each financial year instead of each quarter as had been done previously. It was also arranged that any temporary loans which might be contracted were to be provided for by an addition to the Annual Charge, so that there would be no possible means of encroaching on the settled annual amount of £28,000,000. For instance, in 1881 it was arranged that certain Exchequer Bills should be repaid by means of a terminable annuity of £800,000. That amount, therefore, was added to the Annual Charge. There have been several operations of this description. The Act directs that the New Sinking Fund is to be applied within six months of the date it is issued in purchase of:

1. Annuities (perpetual and terminable).
2. Exchequer Bills or Bonds, whether held by the public or sent in for payment.

3. In 1877 the application of the New Sinking Fund and the Old Sinking Fund was extended to Treasury Bills. The New Sinking Fund, however, was not to be applied in the repayment of deficiency advances or in the repayment of advances on ways and means.

In the financial year 1887-8 the permanent charge was reduced from £28,000,000 to £26,000,000 by Mr. Goschen. In 1888, at the time of Mr. Goschen's great Conversion Scheme, there was a large saving of interest effected by that conversion, and on account of that the Annual Charge was again reduced to £25,000,000, at which sum it remained until 1899, when there was a further reduction to £23,000,000. During the South African War extensive borrowings were taking place, and from March, 1900, to March, 1902, the Sinking Fund was entirely suspended. On the termination of the war, 1903, it was increased to £27,000,000, and in 1905 to £28,000,000, but of that amount £1,000,000 was for the repayment of certain Exchequer Bonds which were to be repaid at the rate of £1,000,000 a year. In 1906 the amount was raised to £28,500,000, but it is to be remembered that against this £500,000 was taken from the Old Sinking Fund for other purposes. In 1907 it was again increased to £29,500,000, and of that I think I must give some explanation. In the Budget speech Mr. Asquith stated that £1,500,000 was to be earmarked for Old Age Pensions. The full sum of £29,500,000 was however applied for the purposes of the debt in the following manner:

	On Account of Interest and Management	On Account of Capital	Total
	£	£	£
Interest on the Funded Debt	15,773,533	...	15,773,533
Terminable Annuities . . .	1,053,020	2,543,972	3,596,992
Interest on the Unfunded Debt	1,584,074	...	1,584,074
Management of the Debt . .	180,107	...	180,107
New Sinking Fund . . . .	...	8,365,294	8,365,294
Total	£18,590,734	£10,909,266	£29,500,000

Therefore, you see, they managed to use it all up without apparently setting aside anything for Old Age Pensions.

For the year 1908-9 the fixed annual charge was reduced to £28,000,000. By means of the Old Sinking Fund, the New Sinking Fund and the Terminable Annuities, the Debt was reduced in the year ending 31st March, 1908, by about £18,000,000. In his Budget Speech in May, 1908, Mr. Asquith estimated that during the financial year 1908-9 there would be a further reduction of £15,000,000 made up as follows :

	£
Old Sinking Fund for 1907-8 . .	4,726,000
New Sinking Fund for 1908-9 .	9,775,000
Miscellaneous	500,000
	<hr/>
	£15,001,000

Basing his figures on these estimates, he remarked that during the three years ending 31st March, 1909, the Debt will have been reduced by over £47,000,000, and the annual interest charge by £1,250,000.

That is all I need to say in reference to the New Sinking Fund, though there is no doubt that in regard to the payment of the National Debt the New Sinking Fund is by far the most important item.

Now I must say something with regard to life annuities, and in order to do so I have to go back to an earlier date again, to 1808, at which date the Government first started the issue of life annuities. The scheme was that the holders of Consolidated Three Per Cents. and Reduced Three Per Cents. were to be allowed to surrender their holdings of stock and to take in exchange either annuities on single lives or joint and survivor annuities on two lives. The lives on which the annuities were to be purchased were not necessarily to be beneficially interested in the annuity. Of course the scheme in itself had certain advantages. By selling these annuities and cancelling stock or taking stock in exchange for the annuities a means was provided for paying off so much capital every year, since each annuity as it was paid would gradually extinguish the original debt. It was also anticipated that by allowing people to cancel their stock for annuities a large amount would be taken off the market, and the price would consequently rise. Some little time later it was arranged also that they could purchase these annuities by means of cash. The annuities were to be calculated on the basis of the

Northampton Table, which most of you know. It was a table formed by Dr. Price, of whom I have said a good deal in my last lecture in connection with his famous scheme for getting rid of an enormous amount of debt gradually by accumulating on the one hand and borrowing on the other. The annuities were to be calculated on this table and the rate of interest at which they were to be calculated was to be determined as at the present time, *i.e.*, the interest yielded by Consols at the current price. Proof of age was to be given and every nominee was to be a native of the United Kingdom and also a resident. No distinction was made between male or female lives, the same rates being allowed for both. No person was to be nominated under thirty-five years of age. When the annuity was paid, proof of identification was to be afforded either by the minister of the parish or a justice of the peace. In order that the Commissioners might know the price of the stock so as to be able to calculate the annuity correctly, the Bank of England was to supply the price of Consols and Reduced Threes every day, and that is what is done at the present time. If you go to the National Debt Commissioners to purchase an annuity you will find that they have upon their desk the prices of the stocks and various tables calculated at the corresponding rate of interest. All the dividends on the stock were to be paid to the Commissioners and the annuities were to be paid through the Bank of England. In 1817 the issuing of annuities for cash was commenced, and from that time annuities could be purchased for cash as well as for stock, but an extra commission had to be paid at the rate of 2*s.* 6*d.* per cent. If you go to the Commissioners at the present time, they ask you whether you wish to purchase the annuity for cash or for stock, and if you say cash they look up the price of the stock and you pay an additional 2*s.* 6*d.* per cent. for the right of paying for the annuity in cash instead of stock. It was arranged in 1817 that the Commissioners should grant deferred annuities and reversionary annuities, payable after the death of one life. Even at that date people had begun to find that the rate at which annuities were granted was much too cheap, and Mr. John Finlaison particularly insisted on the point. But nothing appears to have been done until 1827, when a Select Committee sitting on Friendly Societies condemned the Northampton Table. As a consequence of this condemnation, in 1828 the

granting of annuities was altogether stopped for a year or so. The Commissioners had granted annuities in exchange for about £11,000,000 stock, and there was also a considerable sum on account of terminable annuities. I think the total amount was £11,000,000 for life and about £24,000,000 for long annuities, some of which had fallen in. Mr. John Finlaison made a calculation in 1827 that the amount of the loss which the Government had sustained through granting these annuities on an incorrect basis was about £2,250,000. He estimated that by the time the last annuity expired the total amount of loss would be £24,000,000. It is impossible to check these figures, but it is rather curious that in one of the Government Reports published in 1891 there is another calculation given as to the amount of loss, where it is made to be only £890,669.

In 1829 the granting of annuities was resumed, the Commissioners being empowered to take stock, long annuities, or money for the purchase of life annuities either immediate or deferred. It was also provided that the stock was to be immediately cancelled and the annuities paid out of the Consolidated Fund. These annuities were based on a revised table by Mr. John Finlaison, which he had formed from their own experience, and in which he gave the rates for male and female lives separately. The rates were very much reduced, but the ages at which the annuities were granted were extended from 75 to 90, and at age 90 the annuity granted to a male life was £63. 1s. 8d. per cent., and on a female life £42. 4s. per cent. It is a most extraordinary thing that those rates should have been granted, and it was not very long before people found there was something wrong with them. The first one who noticed it was the Marquis of Hertford, who took out annuities on the life of his butler, who was already 90 years of age. No doubt the Marquis thought it was quite possible to keep him alive for five or six years longer, and the old man actually lived five or six years, and thus provided a remunerative investment. The Marquis not only bought an annuity, but pointed the matter out to several other people and a great many of them bought annuities also, and between them, as I say, they kept the old fellow alive for about six or seven years. Other people also began to find the thing out, and as a result there were altogether about 20 or 30 old lives that were taken as

nominees, mostly people in the North of England, and a very considerable profit was made. The large amounts of annuities granted on these lives showed the Commissioners the risk they were running, and in October, 1831, having found that they were making a big loss over these annuities on old lives, they gave notice that from age 80 upwards the same rate was to be given. But even this was not sufficient to stop the speculation, since the rates were still too favourable. In 1834 no less than £1,095,802 had been invested in the purchase of annuities, amounting to £271,746 per annum on 347 carefully selected old lives. It was then decided to discontinue granting annuities on lives over 65 unless the nominees had a beneficial interest in the annuities. But this also failed to stop speculative purchases, and eventually it was arranged in 1852 that no nominees were to be taken, and that is the practice followed at the present time. I have the Government paper here for the purchase of an annuity from the Commissioners. "Form of Request for Purchase of Annuity in Names of Proprietors.—Gentlemen,—I (or we) hereby request permission "to purchase a life annuity of.....in the names of ".....upon the life of....., such annuity "to be for the sole use and benefit of the said....." This makes it quite clear that the annuity is to be for the nominee's benefit.

The earlier speculators had been mostly private people, but after 1834 the insurance companies began to notice that it was a good thing, and they set their agents to work to find suitable lives. The Quakers, whose longevity, owing to their abstemious habits, was well known, were soon recognised as a most favourable class of lives for the purpose required, and the Quaker records in Bishopsgate Street were searched to find suitable people. Plenty of very old ones were found and the companies made a big profit, but unfortunately they missed noticing one thing. They forgot that Quakers had a very great liking for perpetuating the same Christain name. If the son died, then the cousin has the name, or some other relation, so that there is always that one name in the family, and owing to this peculiarity mistakes were made. Annuities were purchased, and after a time the Government, finding that the actual mortality did not seem to agree with the expected, made enquiries and found that in several cases they were paying annuities on people who either did not exist

or, at all events, were not the nominees. A long legal dispute followed, and eventually a number of contracts were cancelled, and both parties had to repay the amounts they had received with interest. This was particularly unfortunate for some insurance companies, who had already divided the large profits made, *e.g.*, two insurance companies between them had to repay £70,000 which had been treated as realized profits.

In 1833 an important innovation was made by allowing depositors in Post Office Savings Banks to purchase annuities, the object being to enable the labouring classes to make provision for their old age on the most favourable terms possible. Fresh rates of annuity were calculated for this purpose and were applicable only to Savings Bank depositors, the interest then being fixed at $3\frac{1}{4}$ per cent. The money received by the Commissioners was to be applied in the purchase of stock which was to be cancelled, the annuities being charged on the Consolidated Fund in the same way as the annuities granted by the Commissioners. The price of the Three Per Cents., equivalent to an interest yield of $3\frac{1}{4}$ per cent. rate of interest, would be about 80, and as during this time the average price of Consols was something over 90, you will see that the rates allowed to the Post Office depositors gave them a very considerable bonus. As a matter of fact, since the same rates were paid for males and females—and probably most of you know that the vitality of females at older ages is much better than that of males—the result was that the Post Office rates were really equivalent to a bonus of about 4 per cent. on the purchase price for males and somewhere about 20 per cent. on the purchase price for female lives. The amount of the annuity was to be limited to £20 a year, and the annuities were not to be assignable except in the case of bankruptcy. An entrance fee of 2s. 6d. was charged on the purchase of the annuity and 1s. per annum after that. These regulations were altered in 1844, when the limit of annuity was raised to £30 and a graduated scale of fees imposed, varying with the amount of annuity. It was at the same time pointed out that these annuities were really not benefiting the class of people for whom they were originally intended, that really very few of the labouring classes were purchasing them, probably because they were not able to do so. It was also found that out of a total number of 7,200 annuitants about 6,000 were females, showing, of course, that

the carelessness in allowing the same rates for males and females had resulted as might have been imagined. In 1853 the rates were revised, the rate of interest being reduced to $3\frac{1}{4}$ per cent., and separate rates provided for male and female. It was also provided that the purchasers of deferred annuities might take out a life assurance to cover the amount of the purchase money of the deferred annuity and assurance combined, with a maximum sum assured of £100. Until 1864 all stock purchased on account of money received from life annuities, whether immediate or deferred, was cancelled, but in that year it was pointed out that this was not really a scientific method in the case of deferred and reversionary annuities, and so from that time forward a fund was set up, and to that fund the amounts of stock received on account of deferred and reversionary annuities were carried.

In 1882 the interest basis of the Post Office annuity rates was altered to 3 per cent., and in 1883 it was again reduced to $2\frac{1}{2}$ per cent. In 1860 a new mortality investigation had taken place, but it was found that the rates were very similar to those of 1829. In 1883 another investigation of the annuity experience was made by Mr. A. J. Finlaison, on which the new rates were based. After Mr. Goschen's scheme new schedules were constructed, the current daily price of the $2\frac{1}{2}$ per cent. stock being taken as the basis of exchange instead of the 3 per cent. stocks which were extinguished by the conversion. You can still purchase these annuities either through the Post Office or the National Debt Commissioners. In the case of the Post Office there are various restrictions to which the purchaser has to submit. You must not purchase an annuity for more than £100, and the annuity is calculated with interest at $2\frac{1}{2}$ per cent.; whereas with the National Debt Commissioners the rate of interest is very much more favourable than $2\frac{1}{2}$ per cent., and is based on the yield of Consols at present prices and there are no restrictions as to amount.

In estimating the value of these annuities so as to make up the total of the National Debt, since the amount of life annuities granted is a liability constituting a portion of the National Debt, the value of the annuities is calculated on the rate of interest at which each annuity was granted.

My next subject is the various Stock Conversions which have taken place. You will readily understand that at

different times it was found necessary, owing to the variation in the credit of the Government, to make issues at different rates of interest, and then as the credit improved it was found that these stocks could be converted into others of a different denomination, and, moreover, numerous stocks could be thrown into one large amount, yielding perhaps a lower rate of interest.

In 1822 there were 3 per cent., $3\frac{1}{2}$ per cent., 4 per cent. and 5 per cent. stocks in existence. The whole of the 5 per cent. stock was then converted into 4 per cent. stock at the rate of £105 of the 4 per cent. for £100 of the 5 per cent. The 4 per cent. stock thus formed was known as "the New Fours," and was irredeemable before 1829. This conversion resulted in an annual saving in interest of £1,197,025.

In 1824 "the New Fours" stood at over 106 and "the Old Fours," which were redeemable at six months' notice, at 101 $\frac{3}{4}$. The Chancellor of the Exchequer therefore decided to give notice that "the Old Fours" would be paid off at par unless the holders agreed to exchange for $3\frac{1}{2}$ stock at par. The majority did so agree, and all others were paid off. The saving in interest thus effected was £381,242 per annum.

In 1830 "the New Fours" which had become redeemable in 1829 could be dealt with, and it was arranged to give the holders certain options. I want you particularly to notice what kind of options these were, because for an understanding of the subject of the National Debt conversions it is necessary to notice the various schemes which have been applied, and why some have been successful and others entirely unsuccessful. The Government offered to the holders of "the New Fours," (a) £70 of 5 per cent. stock guaranteed against reduction of interest or repayment for 42 years, showing a nominal annual yield of £3. 10s.; (b) £100 of $3\frac{1}{2}$ per cent. stock guaranteed for 10 years; (c) repayment at par in cash. There were £153,500,000 of "the New Fours," and of those only about £3,000,000 were paid off, about £500,000 accepted 5 per cent. stock, and £150,000,000 accepted $3\frac{1}{2}$ per cent. stock.

Now let us just see what it really comes to, because it seems to me very difficult to imagine how people could have been expected to take the £70 of 5 per cent. stock, which would have involved the loss of £30 at the end of 42 years,

as you must assume it would be paid off then. For the first 10 years the income in both cases would be £3. 10s. per annum, and therefore in order to make the offer of the 5 per cent. stock attractive it was necessary to imagine that the holders of the $3\frac{1}{2}$ per cent. stock would be repaid or subjected to reduction of interest. Even if it had been assumed that at the end of the 10 years interest would be reduced to 3 per cent. the value of the loss of $\frac{1}{2}$ per cent. per annum for the remaining thirty-two years would be less than the present value of the the loss of £30 at the end of the forty-two years. The calculations are as follows :—

(a) Present value of £30 deferred 42 years, <i>i.e.</i> , 10 years at $3\frac{1}{2}$ per cent. and 32 years at 3 per cent.	£8 5 0 approx.
(b) Present value of 10s. per annum for 32 years valued at 3 per cent. and deferred 10 years on a $3\frac{1}{2}$ per cent. basis	7 5 0 approx.
Net gain to those who accept $3\frac{1}{2}$ per cent. stock	<u>£1 0 0 approx</u>

Thus, on the basis which I have suggested, the net gain to the $3\frac{1}{2}$ per cent. stockholders would have been £1 per cent., but the actual results were more favourable than this, as the yield shown by the stock at the end of 10 years was more than 3 per cent., as everybody assumed it would be. It will be noticed that nearly everybody accepted $3\frac{1}{2}$ per cent. stock and practically nobody 5 per cent. stock.

In 1844 came Mr. Goulburn's conversion. At that time the 3 per cent. Consols were standing at slightly over 98, and it was therefore decided to endeavour to effect the conversion of about £250,000,000 of $3\frac{1}{2}$ per cent. stock into 3 per cent. stock by exchanging for stock at par with $3\frac{1}{4}$ per cent. guaranteed for 10 years and thereafter 3 per cent. guaranteed for 20 years. The guarantee against reduction of interest for 30 years appears to have been greatly appreciated, and the conversion was an extraordinary success, only about £100,000 dissenting. The converted stock was known as the New Threes. The time for the conversion was happily chosen, for

a year before the Three Per Cents. had been as low as $92\frac{1}{8}$, and a year after the conversion they fell to $91\frac{1}{8}$.

In 1853 Mr. Gladstone attempted to carry out a scheme of conversion which however failed, owing probably to its complicated nature. Mr. Gladstone proposed to the holders of the South Sea Annuities (including the capital stock of that company upon which the Government was paying 3 per cent.) and to the holders of some 3 per cent. stocks dating from 1726 and 1751 that they should accept in exchange for each £100 stock either of the following:

- (a) £82. 10s. of $3\frac{1}{2}$ per cent. stock guaranteed against conversion or repayment until 1890.
- (b) £110 of $2\frac{1}{2}$ per cent. stock guaranteed against conversion or repayment until 1890.
- (c) £100 Exchequer Bond bearing interest at $2\frac{3}{4}$ per cent. until 1864, and $2\frac{1}{2}$ per cent. thereafter, and guaranteed against conversion or repayment until 1894.

Mr. Gladstone seems to have been very confident that the scheme would be successful, and he proposed that these same options should be granted to the holders of Consols and the holders of the Reduced Three Per Cents. His object, of course, was to lay the foundation for one big $2\frac{1}{2}$ per cent. stock. Mr. Gladstone's confidence seemed to have been shared by the House of Commons, for there was considerable alarm caused by the enormous increase in the nominal amount of stock which would take place if everybody accepted the $2\frac{1}{2}$ per cent. The scheme was passed, but with the limitation that not more than £30,000,000 of Consols and £30,000,000 of Reduced Threes were to be allowed to accept these offers. These limitations eventually were found to be quite unnecessary, because only about £1,500,000 of the two classes combined came into the scheme, although for the most part they did apply for $2\frac{1}{2}$ per cent. stock. The South Sea Company absolutely refused the offer and were paid off at par. There were only about £1,500,000 of the old 3 per cent. stockholders applying for $2\frac{1}{2}$ and $3\frac{1}{2}$ per cents., for most of them preferred cash. The net result of the scheme was to cancel five classes of stock and to create two new classes, namely, the $2\frac{1}{2}$ per cent., something over £3,000,000, and the $3\frac{1}{2}$ per cent. of about £250,000, both guaranteed against conversion or repayment

until 1390. About £8,000,000 was paid off in cash and only about £10,000 Exchequer Bonds were applied for in exchange for stock. The new $3\frac{1}{2}$ per cent. stock was eventually paid off in 1894.

After Mr. Gladstone's failure everybody seemed to fight shy of anything like Stock Conversions, and nothing else of the sort took place for another thirty years, when Mr. Childers proposed his scheme in 1884. Consols were standing at over par, and he attempted a conversion to $2\frac{3}{4}$ per cent. and $2\frac{1}{2}$ per cent. He proposed to the holders of £345,301,591 of Consols redeemable on one year's notice, £183,968,248 of the New Threes also redeemable at a year's notice, and £83,491,222 Reduced Threes which were redeemable without notice, the option of exchanging for the following: £102 $2\frac{3}{4}$ per cent. stock guaranteed against conversion or repayment until January, 1905, or £108 $2\frac{1}{2}$ per cent. stock guaranteed against conversion or repayment until January, 1905.

The first option gave a yield of £2. 16s. per annum and the second a yield of £2. 14s. per annum. It was thought that the fear of a conversion of the $2\frac{3}{4}$ per cent. stock in 1905 might induce holders to take up the $2\frac{1}{2}$ per cent. stock. This scheme also proved an almost complete failure. The total amount of new stock created was £4,647,799 $2\frac{3}{4}$ per cents. and £19,230,401 of $2\frac{1}{2}$ per cents. These stocks are still in existence, as you will notice in the papers. The total amount of 3 per cent. stock converted was £22,362,495, of which nearly £12,000,000 was held by Government departments. They had no option in the matter and simply changed.

Now we come to Mr. Goschen's conversion of 1888. With regard to this, there have been all sorts of criticisms of recent years. Many people say that it was entirely due to these stocks having been reduced to $2\frac{1}{2}$ per cent. that we had the great fall in trustee securities and various other things, but it is not our part, I think, in considering this scheme to give any judgment on those points. All I want you to do is to notice the extremely clever way in which Mr. Goschen carried out his scheme, and why it was such a brilliant success. The stocks which he proposed to deal with were as follows:—

- (a) £166,000,000 New Three Per Cents. repayable at par without notice. This stock was created under Mr. Goulburn's conversion in 1844.

- (b) £69,000,000 Reduced Three Per Cents. repayable at par on one year's notice. This stock was created under Mr. Pelham's conversion in 1749.
- (c) £323,000,000 Consolidated 3 per cent. repayable at par on one year's notice. This stock had been created in 1752 by the consolidation of various 3 per cent. annuities existing at that time, various issues of the stock being subsequently made.

In addition to this there were £34,000,000 which had been exchanged for terminable annuities, which annuities were now reconverted into stock for the purposes of the conversion. The total amount dealt with was therefore over £592,000,000.

Mr. Goschen very wisely decided before he started on his conversion to consider carefully previous conversions to see what were the reasons of their failure or their success, and this is the way he summed it up: "I have learnt three main things from the history of these past conversions. The first is that it is advisable to avoid nominal additions to the capital, as it may cause eventual loss to the Government, and would be likely to prevent the success of the Bill in Parliament. Secondly, to avoid complicated options and not to give people a large number of things to decide upon, because they will not understand them, and if they do they will never make up their minds, but give them one thing only and they will take it. The third is, that guarantees against redemptions or further reduction in the interest for fixed periods have generally been appreciated and give stability, something upon which people can rely." The plan he decided to adopt embraced all these features and was similar to Mr. Goulburn's plan in 1844. He decided to have only one stock, and the conditions were to be as follows:—

- (a) Interest 3 per cent. until April, 1889.
- (b) Interest $2\frac{3}{4}$ per cent. for 14 years from 5th April, 1889, until 5th April, 1903.
- (c) Interest $2\frac{1}{2}$ per cent. for 20 years from 5th April, 1903, to 5th April, 1923, and thereafter the stock to be redeemable at the option of the Government, but interest to continue at the same rate until such redemption.

- (d) Interest to be payable quarterly on 5th January, 5th April, 5th July and 5th October, instead of half-yearly as it had previously been.

The New Three Per Cents. were not entitled to any notice of redemption, so of course they could very easily be dealt with. They were told that unless they gave notice that they wanted to be paid off in cash, their stock would be automatically changed, and in a very little while it was found that only £750,000 of the whole £166,000,000 decided to take cash. Then as regarded the holders of Consols and Reduced Threes, he thought it was a good plan to give them a bonus, and, in order to bring them in as quickly as possible, he said that anyone who agreed by the 12th April, 1888, was to have $\frac{1}{4}$ per cent. bonus. I do not think myself that would have caused the scheme to be such a great success as it was if it had not been that he also provided that 18*d.* per cent. was to be paid to all recognized agents, such as stockbrokers, bankers, etc., who lodged assents on behalf of their clients before that day. Had it not been for this brokerage allowance the majority of these agents would not have troubled to communicate with their clients advising the exchange. By the 15th April £307,000,000 had assented and only £84,500,000 remained outstanding. By the 5th November, 1888, this figure had been reduced to £42,300,000, that is to say, in six months about thirteen-fourteenths of the total had been converted from 3 per cent. to $2\frac{3}{4}$ per cent. stock. As soon as it was seen that the conversion scheme was a success it was decided to give the necessary notice to the holders of Consols and Reduced Threes, and this was done on the 5th July, 1888. It was necessary to act with considerable caution in arranging for the payment of so large a sum, as otherwise the disturbance to the Money Market might easily cause trouble, and therefore every care was taken to spread the payments over as long as possible. In the first place, the Commissioners for the Reduction of the National Debt sent out notices to all outstanding holders of Consols and Reduced Threes offering to purchase their stock at £100 $\frac{1}{2}$ on the day when the half year's interest fell due, namely, 5th of April, 1889. The amount so purchased was something over £1,000,000. At the same time the Commissioners bought rather more than

£3,000,000 partly by cash purchases in the market, but mainly by means of exchanges for Local Loans Stock.

The Redemption Act received the Royal Assent on the 11th April, 1889. By the terms of this Act the 3 per cent. Annuities (*i.e.*, the Consols and the Reduced Threes) were "to cease and be understood to be redeemed by payment of £100 in cash for every £100 of stock held," together with interest up to the 6th July, 1889. Such payment to be made at the Bank of England or by Government on the 6th July, or at any time subsequently between that date and 1st October, 1889. Such payments were to be made only on application, and all stock not redeemed by the 1st October, 1889, was to be automatically converted into the new 2½ per cent. stock.

With the object of spreading the payments, over £5,250,000 was paid off under discount on the 14th May, 1889, and further amounts later on. On the 6th July, 1889, there was only £26,500,000 unconverted, and of this £6,250,000 was in the hands of Public Departments and therefore not to be considered. By the 1st October, 1889, £11,750,000 had been paid off in cash and the remainder in accordance with the Act was automatically converted.

The money required for the purpose of the conversion was raised by—

- (a) Issue of Treasury Bills.
- (b) Issue of Exchequer Bonds.
- (c) Borrowing from National Debt Commissioners.
- (d) Borrowing from Bank of England.
- (e) Borrowing from Bank of Ireland.

The incidental costs of the conversion amounted to about £3,000,000, made up as follows:—

The Bonus of 5s. per cent. on Consols and Reduced 3 per cent. in April, 1888	£958,500
Commission of 1s. 6d. per cent.	234,000
Remuneration to the Banks of England and Ireland	101,500
Extra quarter's dividend	1,716,000
	<hr/>
	£3,010,000
	<hr/>

The cost of an extra quarter's dividend was incurred since the full half yearly dividend was paid in April and the quarterly dividend in July, October, and January, making five quarters' interest for the financial year 1889-90, *i.e.*, an additional £1,716,000. The result was to establish an enormous $2\frac{3}{4}$ per cent. stock amounting to £566,000,000. The annual saving in interest was about £1,500,000, with a further saving of a similar sum from 1903. Nobody who carefully studies the detail of Mr. Goschen's great Conversion Scheme can fail to admire the wonderful ability which he displayed, but at the same time it is only fair to point out that he was singularly fortunate in the time chosen for his operations, which extended over eighteen months, during the whole of which period there was no international disturbance. The much greater difficulty in converting stocks when notice is required is apparent, for during even a few months the whole complexion of international affairs may entirely change. As to whether the existing $2\frac{1}{2}$ per cent. Consols will ever be further reduced I will not venture to predict, but whoever undertook such a conversion would probably thank Mr. Goschen for removing all difficulty as to notice, for, as you are probably aware, Consols may be redeemed at par on giving only one month's notice at any time after 5th April, 1923.

The Funded Debt, at the 31st March, 1908, the latest date for which figures are available, stood as follows:

1. Two and a-half per cent. Consols: This is the stock that originated in 1752 and was converted into a $2\frac{3}{4}$ per cent. stock in 1888 by Mr. Goschen, the interest automatically falling to $2\frac{1}{2}$ per cent. in 1903. Further issues of this stock were made during the South African War.

The amount of this stock was:

(a) In the Books of the Bank of England	£561,156,822
(b) In the Books of the Bank of Ireland .	16,185,195
Total	<u>£577,342,017</u>

2. Two and three-quarters per cent.: This was a creation of Mr. Childers in 1884. The conversion, as I have already pointed out, was a failure, only a small amount of the stock being issued. The amount was:

(a) In the Books of the Bank of England .	£4,104,323
(b) In the Books of the Bank of Ireland .	46,754
Total	<u>£4,151,077</u>

3. Two and a-half per cent.: This stock was created by Mr. Gladstone in 1853, at the time when the South Sea Stocks were got rid of. It was added to by Mr. Childers in his conversion mentioned above.

(a) In the Books of the Bank of England .	£30,144,235
(b) In the Books of the Bank of Ireland .	325,692
Total	<u>£30,469,927</u>

In addition to these stocks there are the debts due to the Banks of England and Ireland, to which I have repeatedly referred.

(a) Bank of England	£11,015,100
(b) Bank of Ireland	2,630,769
Total	<u>£13,645,869</u>

Total Funded Debt :

(a) In the Books of the Bank of England	£606,420,480
(b) In the Books of the Bank of Ireland	19,188,410
Grand Total	<u>£625,608,890</u>

TERMINABLE ANNUITIES.

Now I must say something about Terminable Annuities. I have already mentioned that in connection with the various "Lottery Loans," long term annuities were granted by way of bonus as extra inducements to the public to subscribe. These annuities were first granted in 1761, and together with all those subsequently granted were for such terms of years that they expired in 1860. In the report of the Finance Committee issued in 1828, it was recommended that the Commissioners for the Reduction of the National Debt should be given powers to grant terminable annuities in exchange for stock, but the plan was not immediately adopted, no such powers being included in the Sinking Fund Act of 1829. However, in 1833 a further Act was passed conferring the necessary powers, and almost immediately notice was given by the Commissioners that they would be prepared to grant annuities-

certain to the extent of £300,000 per annum in the following manner :—

- (1) An annuity-certain of £3 to continue for 100 years would be granted for £100 of 3 per cent. stock.
- (2) A bonus of £3 in cash would be granted on the completion of the exchange.

You will see that that was really a rather remarkable proposal, because that £3 bonus must be considered as the present value of £100 due 100 years hence. If the stock yielded $3\frac{1}{2}$ per cent. it would be worth more than £3, but as a matter of fact it yielded considerably less than $3\frac{1}{2}$ per cent. The lower the rate of interest the larger would be the present value of the £100. The offer was to remain open for one month provided that not more than £10,000,000 of stock was offered for exchange during that time. Only one offer was received in response to this notice, the amount of stock involved being £3,000.

Some little time later the Commissioners arranged to take over about £16,000,000 of Consols from various insurance companies, banks, etc., granting them in exchange annuities-certain for various terms of years, from 10 years upwards. One great disadvantage of these annuities-certain was that they were charged with income tax on the whole of the annual instalment, although this consisted partly of capital. The exchange of the £16,000,000 just referred to was made during that happy period 1815 to 1842, when no income tax was in force, but unfortunately it was reimposed in the latter year.

In 1860 the expiration of the long annuities released an annual charge of about £1,250,000, the annuities in the hands of the public at that time being quite insignificant.

In 1863 the Government adopted an entirely different method. The annuities were not offered to the public, but £5,000,000 of stock held by the Savings Banks Fund was exchanged for an annuity of £315,017, expiring in 1885. The annuity was calculated at about 3 per cent., and it was estimated that the Post Office, taking only the interest and investing the balance, by the end of twenty-two years would have replaced their original £5,000,000 of stock. During those twenty-two years stock stood at such a low price that by the end of the period they would have had a very considerable surplus over

and above the £5,000,000. I may say that various alterations had been made from time to time with regard to the terms of these annuities, but that does not really affect the point that I want to make. If they had invested this capital amount for the time they would have got a considerable amount extra and, therefore, it was provided by Act of Parliament that the surplus was to be cancelled and applied to the reduction of the National Debt, so that the Post Office obtained no advantage whatever. If considered merely as an ordinary commercial undertaking they would have made a very considerable gain, which would have proved very useful to them at the present time if they had kept it.

In 1867 a further £29,000,000 of stock held by the Savings Banks was converted into an annuity. Again, in 1870, £7,000,000 was converted, and in 1874 another £7,000,000. In all these cases the annuities were for such terms that they ceased in 1885. In 1883 £40,000,000 of stock standing in the names of Suitors of the High Court of Justice was converted by Mr. Childers into terminable annuities expiring in 1903, and another £30,000,000 belonging to the Savings Banks was converted into annuities running for five, ten, and fifteen years respectively. At the same time all the annuities ceasing in 1885, and therefore still having two years to run, were converted into longer annuities similar to those just created, in order to lessen the annual charge.

Mr. Goschen, in 1887, in order to reduce the National Debt charge, changed the Savings Banks annuities created in 1883 into others having a uniform term of fifteen years. In 1888, when he carried through his great Conversion Scheme, he first re-converted all annuities into stock, and then re-converted them into annuities-certain based on a $2\frac{3}{4}$ per cent. interest rate.

In 1892 £13,000,000 of Exchequer Bonds held on account of the Savings Banks Funds were funded by setting up a Book Debt charged on the Consolidated Fund, and, in 1899, this book debt was exchanged for a terminable annuity expiring in 1924.

In April, 1899, before the South African War had broken out, the annuities created by Mr. Goschen in 1887 were cancelled, and in their place others were created that expire in 1911-2, thus extending the remaining three years to

thirteen years. At the same time £15,000,000 of Stock held by the Post Office Savings Bank was exchanged for a terminable annuity expiring in 1922-3.

For two years during the South African War interest only was paid on the National Debt, and all terminable annuities re-converted into stock. At the close of the war the annuities were re-created with the same unexpired term, and they consequently will now expire in 1913-4 and 1924-5 instead of 1911-2 and 1922-3 as originally provided.

UNFUNDED DEBT.

The distinction between Funded Debt and Unfunded Debt is that the former is repayable *only at the option of the Government* and the latter is repayable at a fixed date.

I have already referred to various early portions of the Unfunded Debt, and I will now describe the more modern forms in which this portion of the national indebtedness has been contracted. During the great recoinage in 1696 a great dearth of currency arose, and the Chancellor of the Exchequer of that time (the great Charles Montague) supplied this want by the issue of what were originally known as Bills of Credit, but subsequently were referred to as Exchequer Bills. The first issue was authorised by 7 and 8 William and Mary c. 31, the amount being £1,500,000. They were to be for such sums as were most convenient, and were issued for amounts of £5 and upwards. Interest was limited to a maximum of 3*d.* per cent. per day, *i.e.*, about £4. 11*s.* per annum. The Bills were to be payable on demand, both principal and interest, at the Exchequer. Holders were entitled to commute them for a perpetual annuity of 7 per cent., but the annuities were to be redeemable at the option of the Government. If the duties on which payments were charged were insufficient, the deficiency was to be charged on any unappropriated money.

No provision was made in the Act for allowing the Bills to be used for the purpose of paying taxes, but directions were given that they were to be so taken, and as a matter of fact it was permissible to use them for this purpose right down to the time when they were abolished. The first issue was made on the 14th July, 1696, but only £159,169 out of the authorized amount of £1,500,000 were taken up. I do not know what the rate of interest was;

Mr. Francis in his "Chronicles and Characters of the Stock Exchange" says that no interest at all was allowed at the commencement, but there appears to be some difference in the accounts, and I do not feel certain of the accuracy of his statement. The public did not take to them, and I think very likely it was because they were not legal currency and could be given in payment only to those who were willing to accept them. By the following Christmas only £59,364 of these were outstanding.

In 1697 a further issue of £1,500,000 was made, and this apparently met with more favour. Interest was allowed at the rate of 5*d.* per cent. a day, or £7. 12*s.* 1*d.* per annum. The following is the form of the Exchequer Bill, the italics being in writing:

No. 188.

Exchequer,

26th April, 1677.

By virtue of an Act of Parliament passed in the 8th year of William and Mary.

This Bill entitles the Bearer to *Five Pounds* to pass in all payments to receivers and collectors of any Ayds Taxes or Supplys for the service of the wars for the year 1697 (except ye 3/- Ayd) to be received and satisfied by ye said receiver or collector under ye Penalties in ye Act contained.

R. Howard.

A farthing a day interest.

L. S.

This Bill bears the following endorsements on the back:

6 Dec. 1697—Payd Duty on malt.

J. Whelham 5. 4. 8½

his

Hy. + Turnbull

mark

25 Feb. 1698—From Exchequer A. Bernar.

Exh. pd. ye Trustees Saml. Edwards.

30 May 1698—Malt at Bridgnorth.

Danl. Leson 5. 6. 4½.

J. Powel.

6 July 1698—From Exchequer M. Grubb.

31 Jan. 1701—Paid customs for Johnathan Matthews

6. 13. 6½ J. Branfell.

15 Nov. 1701—Cancelled on

½ 4th 3/- Ayd. L. Herne.

It will be noticed that the amounts stated do not work out correctly except in the first case. In the second, possibly £5. 6s. 4½*d.* should read £5. 8s. 5½*d.* In the third endorsement I make the correct amount £6. 8s. 8½*d.*, so possibly Mr. Johnathan Matthews handed over to the Customs Officer (Mr. J. Branfell) 4*s.* 10*d.* in cash in order to settle his account.

Like all other Government Securities, these Exchequer Bills occasionally fell to a very large discount, sometimes as much as 40 per cent., and frequently they were funded as permanent debt. Large amounts were issued in the form of Exchequer Bills from time to time. Thus in 1817 the amount of Exchequer Bills outstanding was £57,000,000. They were issued both for ordinary loan purposes and for anticipating the revenue, in order to pay for supplies of the year of issue and the succeeding year. The interest varied very considerably, and in 1852-3 fell to only 1*d.* per cent. per day, that is, £1. 10*s.* 5*d.* per cent. per annum.

The form in which they were issued in modern times was regulated by the Act 29 Vict. c. 25, which remained in force down to the time that Exchequer Bills were abolished in 1897. The following is a copy of an Exchequer Bill under this Act, one of the final issue :

By virtue of Acts 29 Vict. c. 25 and 52 Vict. c. 6.

Dated 11th March, 1892.

£1,000.

This Exchequer Bill entitles.....*
or order to claim payment of One Thousand pounds at the Bank of England out of the Consolidated Fund, at the expiration of any period of twelve months not later than five years from the date hereof.

Interest on this Bill will be paid half yearly at such rate per centum per annum as shall be notified from time to time in the *London Gazette* by the Commissioners of Her Majesty's Treasury.

This Bill may be paid for the sum of One Thousand pounds and Interest accrued thereon to the Receivers and

* If the Blank is not filled in, this Bill will be paid to Bearer.

Collectors, in the United Kingdom of any of the Public Revenues, Aids, Taxes or Supplies, or to the account of Her Majesty's Exchequer any time in the last six months of every year commencing from the day of the date hereof in which it shall have currency by law.

R. C. WELBY,

Secretary to Her Majesty's Treasury.

N.B.—This Bill will be paid off or exchanged on the 11th of March 1897.

Notice of payment or exchange and of the date when the Bill must be delivered for that purpose will be published in the *London Gazette* not later the 21 days before the said 11th of March.

The Bill bore ten interest coupons, each for half a year's interest. The following is a copy of one of the coupons :—

Exchequer Bill Interest Certificate.

Per Acts 29 Vict., c. 25, and 52 Vict., c. 6.

This Coupon entitles the Bearer to interest on the above sum for the half year to 11th March, 1897.

R. E. WELBY,

Secretary to Her Majesty's Treasury.

The Bills were therefore equivalent to twelve months' Bills, although issued for five years. Interest was fixed half-yearly and the holder had no option of repayment if the Government suddenly reduced the rate of interest at a half-yearly period other than an anniversary of the date of issue. Apparently his remedy was to use the Bill for the payment of taxes, but there is some confusion on this point. In Fenn's valuable book on the Funds it is stated that the holder had the option of repayment at the end of each six months, and the *Stock Exchange Year Book* also refers to them as Six Months' Bills. On the other hand, *Burdett* states that repayment could only be claimed on an anniversary of the date of issue, and this is confirmed by the Exchequer Bill Act, 29 Vict. c. 25.

Exchequer Bills continued to be issued for the purposes I have mentioned, but after the introduction of Treasury Bills they gradually fell out of favour, and eventually the Government ceased to issue them in 1897. The provision

that they might be used for revenue purposes by the holder, although of service in earlier days, was quite out of place in modern times, and the method of adjusting the interest half-yearly was also clumsy. Exchequer Bills were only issued twice a year, viz., 11th of March and 11th of June.

Other early forms of Unfunded Debt were Navy Bills, which were issued by the Navy Office in payment of stores, wages of seamen, &c., and, in fact, to answer any purpose in that important branch of supply. Interest was allowed, not from the date of issue, but after they had remained outstanding for a certain time. You will remember that the Navy Five Per Cents. were formed by the funding of large amounts of these bills.

The Ordnance Bills or Debentures were of the same form as the Navy Bills, and were issued by the Ordnance Department. These were paid off out of the supplies voted (unless they were funded), and were, in effect, anticipations of the supply votes for military and naval services.

In 1853, at the time of the conversion of the South Sea Annuities by Mr. Gladstone, a new form of security was issued, viz., Exchequer Bonds. This issue was really a form of funded debt, as the bonds were only repayable at the option of the Government. All subsequent issues however have been repayable at fixed dates. They were in the form of bonds to bearer, and were transferable by simple delivery, and were to bear interest at $2\frac{3}{4}$ per cent. for ten years, and then $2\frac{1}{2}$ per cent. for another thirty years. £400,000 were issued in 1853-4, in Mr. Gladstone's conversion, partly in exchange for stock and partly in exchange for Exchequer Bills. In 1854-5 an issue of Exchequer Bonds was made in three series repayable in 1857-8-9. They continued to be issued for terms of four or five years at intervals during the next ten years.

In the course of Mr. Goschen's great Conversion recourse was had to an issue of Exchequer Bonds in order to pay off dissentients, £2,000,000 being issued at $2\frac{3}{4}$ per cent., repayable in two years. Just previously, in July, 1889, £1,000,000 had been raised from the National Debt Commissioners for twelve months at $2\frac{3}{4}$ per cent. These amounts were eventually cleared off in 1896. During the South African War the issue of Exchequer Bonds was resorted to in order to meet part of the expenses incurred.

Most of these were repaid by 1907. The only amount outstanding is the balance of the £10,000,000 issued in 1905 at $2\frac{3}{4}$ per cent., repayable by drawings of £1,000,000 annually for ten years. To provide the funds to meet the Bonds at maturity, £1,000,000 was added to the fixed annual charge. Other Bonds have been issued for Naval and Military Works and for the purposes of the Cunard agreement, but these do not form part of the Unfunded Debt, being included under the heading of "Other Capital Liabilities," the interest and repayment of which is provided for in the annual Supply Bills. Another item included under the heading of Unfunded Debt is the National War Loan, or "Khaki Loan," as it is popularly called. This was issued in 1900, the sum raised being £30,000,000 at $2\frac{3}{4}$ per cent., which is definitely repayable in 1910.

We come now to the most important item in the Unfunded Debt—Treasury Bills, which were introduced by Sir Stafford Northcote in 1877 and superseded Exchequer Bills. Before 1877 the shortest term for which the Government could borrow was twelve months, but it was pointed out that much better terms could be arranged by issuing Bills for a shorter date and in a more easily negotiable form. With the object of enabling the Government to obtain terms which were more in accordance with their credit, statutory power was given in 1877 for the issue of Treasury Bills in their existing form. After a little hesitation, these became established as the finest paper obtainable in any market in the world. No restrictions were placed on the rate of interest, but the term was not to exceed twelve months. The Bills are issued by the Bank of England, and run for three, six and twelve months, and, as they bear no interest, are tendered for at a discount. By the Sinking Fund Act, 1875, Exchequer Bills could be repaid out of the permanent annual charge, provided the Money Act under which the Bills were issued specifically mentioned that repayment could be made therefrom; and by the Treasury Bills Act, 1877, this was extended to Treasury Bills also. One great advantage of this method is that the liabilities are spread over the year instead of falling on two fixed dates, as was the case with the Exchequer Bills, which could not be conveniently dealt with otherwise. During the conversion of 1888 a variation of the usual practice was made by an issue of £2,500,000 for nine months.

The amount of Unfunded Debt outstanding on the 31st March, 1908, was :—

(1) War Stock and War Bonds $2\frac{3}{4}$ per cent., repayable 1910	...	...	£23,959,400
(2) Exchequer Bonds	...	...	8,000,000
(3) Treasury Bills	...	...	12,000,000
			<hr/>
			£43,959,400
			<hr/>

All these items may be paid out of the fixed annual charge.

In addition to the Treasury Bills mentioned there were others outstanding, but these have been issued for supply purposes, and provision for their repayment is made outside the fixed annual charge.

SIXTH LECTURE.

The National Debt.

(Concluded.)

OTHER CAPITAL LIABILITIES.

AS regards the other capital liabilities, I need only say very little. The amounts, although fairly large, are principally on account of the indebtedness incurred by the methods adopted in 1895. As very considerably increased expenditure was found to be advisable for military and naval purposes, it was decided to spread this expenditure over a period of years by raising 35 millions by means of terminable annuities with a term of about 30 years. This method has not been employed for some years now, but recently there has been some talk of the possibility of its being again resorted to. Some of the capital liabilities were created for the purposes of the new public buildings, and were repayable by means of terminable annuities running for 30 to 50 years. You should be careful to notice that these terminable annuities are not the same as those referred to specially under that heading. Those referred to under the heading of terminable annuities are met out of a fixed annual charge, whereas those now referred to are special and are met either out of the Consolidated Fund into which all the receipts of the Government are paid, or they are voted in supply. They are not included with the ordinary National Debt. There was also some money raised in connection with the Cunard Shipping Company by means of Exchequer Bonds. The loan is being repaid by the company, who in the meantime have deposited debenture stock with the Government as security of an amount more than sufficient to meet the case. I do not think that this loan should be properly considered as a liability of the Government, because it does not cost them anything and they have ample security.

MANAGEMENT OF THE NATIONAL DEBT.

In my first Lecture I explained that the original capital of the Bank of England was £1,200,000, which was lent to the Government at 8 per cent., and in addition £4,000 was granted for management expenses. Ever since that time, with the exception of one short period, the management of the National Debt has been in the hands of the Bank of England for the most part, and to a much smaller extent in the hands of the Bank of Ireland. The short exception was that period when the South Sea Company took over the National Debt, or nearly the whole of it, but that arrangement only lasted for a very short time. In the early days the allowance for management was in the form of a salary to the Chief Cashier and Accountant-General. In 1714 there was a loan of £910,000, £250 being granted to the Chief Cashier and £200 to the Accountant-General. A little later on in the same year a further amount of £169,000 was raised, and each of those two fortunate gentlemen obtained a rise of £100.

In 1726 a slightly different arrangement was come to. There was £1,000,000 of capital stock issued then, and the Government made an allowance of £360 per annum. Again, in 1731 a further £800,000 was created, and there was a similar allowance of £360 per annum granted. What I am trying to show you is how the amount of allowance on the management was gradually arrived at. The £360 was not a salary but a simple allowance. In 1742 they went back again to the salary plan. £800,000 of stock was raised in that year and they made an allowance of £250 to the Chief Cashier and £200 to the Accountant-General, which makes £450 altogether on the £800,000, and works out at the rate of £562. 10s. per million.

In 1786 the Debt had increased to a very large extent, and the Bank was then receiving its allowance of £360 per £1,000,000 on £1,769,235, and £562. 10s. per £1,000,000 on £222,333,128. That amounted in all to £125,699. 6s. 6¼d. The Commissioners for auditing the public accounts reported that in their opinion £360 per £1,000,000 was quite sufficient, but eventually the amount was altered to £450 per £1,000,000, and they were also to receive the original £4,000, the amount granted at the origin of the Bank of England, together with £1,898, a further amount which was allowed when part of the South Sea Debt was taken over. This rate continued to be

paid until 1808, when the total debt had very largely increased, and it was considered that better terms should be obtained by the Government. The rates were then fixed as follows: £450 per £1,000,000 when the total Debt was between £300,000,000 and £400,000,000; £340 per £1,000,000 when the total Debt was between £400,000,000 and £600,000,000; and £300 per £1,000,000 when the total Debt was over £600,000,000. Annuities-certain were valued at twenty-five years' purchase to make a nominal capital. There was a great deal of bitter feeling in reference to these rates, and Mr. Francis, in his "History of the Bank of England," is very angry about it. He gives an account of how these rates were settled, and after describing the difficulties of obtaining valuable data he goes on to say: "Under these circumstances they had recourse to the Corporation itself for information. Assuming, as an incontrovertible position," says the Report, "that in proportion as the business becomes enlarged a moderate addition on a large business produces a greater proportional profit than a higher rate on one more confined, it is obvious that the charge of allowance reasonable for £20,000,000 to £25,000,000 becomes profuse and extravagant upon £500,000,000. The increase in the establishment of the Bank which has been rendered necessary by the augmentation of this branch, consists principally in the number of the clerks, of whom the whole number employed in the public business exclusively or principally was, in 1786, 243, in 1796, 313, in 1807, 450, whose salaries, it may be presumed, were calculated on an average at between £120 and £170 for each clerk. Taking that at £135, which exceeds the average of those employed in the South Sea House, the total amount is £60,750, either of which said sums would probably be quite sufficient to provide superannuation funds as well." Incidental expenses he puts down at £15,000, additional buildings, £10,000, and so on. "On this penurious calculation the Committee proceeded to state that the actual increase of officers who transacted the business was in the previous eleven years 137, the annual expenses of whom might vary from £18,000 to £23,000, in addition to the other permanent charges being probably about one-half or two-thirds of that sum, while the increased allowances of management in the last ten years was more than £155,000."

In 1833 the Act renewing the Bank Charter provided that £120,000 per annum should be deducted from the amount allowed for management. That was the beginning of the cutting down, you see.

Then in 1844 there was another arrangement. It was then considered that instead of paying £60,000 as composition for stamp duties on Notes—the Notes for some time had not been stamped but a composition had been paid—the amount deducted from the allowance for management should be increased from £120,000 to £180,000.

In 1861 further re-arrangement was made. The original allowance of £4,000 per annum and the South Sea Company's allowance of £1,898 per annum were cancelled, and the following rates of remuneration were fixed:—

When the Debt exceeds £300,000,000, and does not amount to £400,000,000, £450 per million;

When the Debt exceeds £400,000,000 and does not exceed £600,000,000, £300 per million;

When the Debt exceeds £600,000,000, £300 per million up to £600,000,000, and £150 per million after.

In respect to the Unfunded Debt: An allowance at the rate of £100 per million on Exchequer Bills.

This allowance of £100 per million was in 1866 extended to Exchequer Bonds, and in 1877 to Treasury Bills.

The rates allowed for management were again reduced in 1892 by the Act 55 and 56 Vict. c. 48 to the following amounts:—

£325 per million for the first £500,000,000;

£100 per million for any amount over £500,000,000;

£200 per million for Treasury Bills;

£100 per million for Exchequer Bonds;

Minimum allowance to be £160,000 per annum;

No allowance for management of Debt due to Bank of England;

No allowance for management of stock unclaimed.

These rates are still being paid, no further alteration having being made.

With regard to the Debt management by the Bank of Ireland, the original Charter of the Bank of Ireland, which was granted in 1783, gave no allowance whatever for

management, and it was not until 1798, after provision had been made for changing the Irish Debentures into stock inscribed in the books of the Bank, that any allowance was made. The rate then allowed was: £450 per million on any principal sum on which interest was payable at the Bank of Ireland; £112. 10s. for every £10,000 annuity payable at the Bank of Ireland; and £805. 15s. 10d. for every £1,000,000 of new loan, for taking subscriptions and receiving contributions. In 1808 the Bank of Ireland, in consideration of the renewal of its Charter, agreed to manage Debt free of expense; but in 1865, when the rate of interest on their Debt was reduced to 3 per cent., management allowances were given again, and these were at the rate of £450 per million when the Debt was less than £30,000,000; £300 per million when it was over £30,000,000 and under £40,000,000; and £150 on any amount more than £40,000,000. This rate of remuneration is still paid to the Bank of Ireland according to the amount actually inscribed with them. You can inscribe any description of the Funded Debt either in the Bank of England or Bank of Ireland, and this inscription may be transferred, as I shall show you, from one Bank to the other. Therefore, of course, the total amount which may be credited to either one of those Banks may vary from year to year owing to transfers of stock. No Unfunded Debt is issued by the Bank of Ireland.

The next important thing is with regard to the Acts relating to the transfer and management of the Debt, and here I begin to touch on various matters which are of more importance in connection with Stock Exchange Securities. There have been a number of Acts relating to the transfer and management of stock, but I do not think it is necessary to go into these as they were consolidated in the Act of 1870 [33 & 34 Vict. c. 71]. There have been various amending Acts since, but the 1870 Act is the principal Act. [This Act, I have already pointed out, provided that the Bank of England was to continue so long as any portion of any National Debt remained unredeemed, and that virtually gave the Bank its Charter in perpetuity. Part II of the Act provides that the Debt is to be redeemable at par and is to be charged on the Consolidated Fund, and that it is to be free from all taxes. One would naturally suppose that it is not subject to income tax, but any of you who happen to own Consols

will know that when you receive your dividend you find printed on the form the announcement that the amount of income tax has been deducted before you receive it, in exactly the same way as any other stocks on which income tax is deductible at its source.* I must say it is rather difficult to imagine what is meant by the statement that the Debt is free of tax. The explanation given is that the dividends on Consols are taxed as income; that all income is taxed, and that when the Act says "free from all taxes" it means that no special taxes will be inflicted on the fundholder as such.

The third part of the Act deals with payments of dividends, and provides that the Bank is to employ a Chief Cashier and Chief Accountant. The Chief Cashier is to present the account for dividends, and the Accountant is to inspect and examine all receipts and payments. The dividends are to be issued out of the Consolidated Fund on the warrant of the Treasury alone. It then goes on to provide, with regard to executors or administrators, that the Bank shall not be required to pay any dividends until the probate or letters of administration have been left at the Bank. For this purpose there is a fairly large department in the Bank of England, which deals with no other business. Clause 20 in the same Act made a most important alteration with regard to posting dividends. It provided that dividend warrants could be sent by post. Before that, every fundholder had to apply in person or to give somebody a power of attorney to receive his dividend for him. Then, by the National Debt Act, 1889, it was provided that a stockholder could have the warrants sent to any person or company he directed. One effect of this is that they can be sent to a banking company. As I explained in my first Lecture, all the large banks keep accounts at the Bank of England. The result of this provision is that the dividend warrant can be posted to the stockholders' bank, who in their turn pay it into the Bank of England. By these means a large portion of the dividend payments are effected by transfers in the books of the Bank of England, and the money never leaves its vaults at all. Up to this time also persons receiving dividends under power of attorney had to attend in person, but this Act provided that after the 1st July, 1890, the warrants could be sent to them by post if they so desired.

* If the half-yearly dividend falls short of 50s. income tax is not deducted at its source, the assessment being made under Schedule D and not under Schedule C of the income tax return.

Part 4 deals with the transfer of stock. It provides that suitable books shall be kept by the Bank of England and the Bank of Ireland and that transfers are to be entered. The transfer is signed by the transferor or his attorney, and no other form of transfer is lawful. The banks are allowed to close their transfer books for fifteen days at each quarter. As probably most of you know, there is generally a period when companies close their books and do not enter up any other transfers of stocks or shares in order that they may make out their dividend warrants. If they kept on transferring the stock from day to day it would be difficult to fix on a point when they could say to whom the dividends were payable. In the case of Consols it is provided that they may have fifteen days in which to do that, but as a matter of fact the arrangements are so complete that they are not closed at all. Formerly the transfers were only allowed on particular days of the week, but that has now been altered. Any particulars of this sort you can get most readily from a book that I shall have to refer to from time to time, or ask you to refer to—*Burdett's Official Intelligence*, the book which gives us the principal portion of our information. You will see that it gives the particulars as to the way in which the stock can be transferred. If you will look in the volume for this year (1909), page 8, and read it carefully, it will enable you to understand the things I shall have to refer to in my next Lecture. When you hold Consols (excepting, of course, Consols to bearer), your title consists of an entry in a book at the Bank of England, and if you sell the stock to somebody else all that really happens is that one name is removed and another one is substituted for it. In *Burdett* you get the following information, "Transfers may be accepted by the buyer between 9.30 and 4 p.m. Monday to Friday or 9.30 to 1 p.m. on Saturdays. At the Bank of Ireland the hours are 10 to 3 except on Saturdays, when they are 10 to 1." But if you transfer on a Saturday between 11 a.m. and 12.30 p.m. you have to make an extra payment of 2s. 6d.

Part 5 deals with the stock certificates which are allowed to be issued with coupons attached; that is to say, you can have what are generally known as Consols to bearer. These coupons are for the amount of the dividend. This form of stock certificate is at present confined to the $2\frac{1}{2}$ per cents., $2\frac{3}{4}$ per cents., and the Irish Guaranteed Land Stocks. The

certificates are for not less than £50, and they must be always in multiples of £50, and not for a larger amount than £1,000. The charge for issuing a certificate like this is 2s. per cent. When the stock certificate is issued the stock ceases to be transferable in the books of the Bank of England, your title then consists simply of that bond or stock certificate. Stock certificates are to bearer, and, of course are transferable simply by delivery. If you have one you can hand it over to somebody else and take the money for it, and if he loses it he must put up with the consequences. They may be endorsed with a name, however, and if that is done they are converted into what are described as nominal certificates. When the name, address, occupation, and so on, of some person has been inserted in the stock certificate, it can thereafter only be transferred by the person named on the certificate. Here, again, if you look in *Burdett* you will find some further information which will perhaps make it a little plainer to you. "Holders
 "of Stock certificates which may have been made nominal
 "by the insertion of a name in the body of the certificate
 "can exchange such for new certificates to bearer on
 "payment of a fee of 1s. per certificate, provided that the
 "certificate surrendered has been released by the nominee to
 "the satisfaction of the Bank. To grant such release
 "certificates must be endorsed by the nominee in the
 "presence of two witnesses, under the same regulations
 "as apply to the powers of attorney for the sale or transfer
 "of stocks inscribed at the Bank." These stock certificates have sheets of interest coupons attached, sufficient to last for five years. "When the supply of coupons
 "attached to a stock certificate is exhausted, the certificate
 "must be presented at the Bank and will be exchanged
 "free of charge for a new certificate with a fresh supply
 "of coupons attached. Certificates may be exchanged
 "for others of either larger or smaller denominations on
 "payment at the rate of 1s. per certificate surrendered." That, of course, is in some cases a very important consideration. Supposing that you purchased a lot of these certificates and you had the coupons to cut off, it would take you a considerable time, and it would be much more convenient to you to exchange that big bundle of certificates for one of a very large amount. The coupons

when cut off are payable at the expiration of three clear days, or if you give them in at one of the branches of the Bank of England you have to wait five days. If the certificates or coupons are lost, fresh ones may be issued on giving an indemnity to the Bank. As regards transfers: You might hold a large amount of Consols in the Bank of England, and find it convenient to go and live in Ireland or *vice versâ*, and therefore you would wish to have the amount transferred from the one bank to the other bank; that is also provided for in this Act. The holder makes an application to the Bank of England and he then has to transfer his stock to the National Debt Commissioners who act as a sort of intermediary, and a transfer certificate is issued to him. As soon as the certificate is issued the Bank notifies the National Debt Commissioners and they cancel the stock from the amount of debt included in the books of the Bank of England. The notification has to be passed on to the Bank of Ireland, who are authorized to enter the stock on their books on production of the transfer certificate issued by the Bank of England. Exactly the same thing happens if it is transferred from the Bank of Ireland to the Bank of England.

I will now say a few words in reference to unclaimed stock and unclaimed dividends. It is rather a curious thing that up to 1790 the Bank considered that any stock or dividend which was not claimed undoubtedly belonged to them. At that time Mr. Pitt, who was rather keen in looking out for any new source of revenue, proposed that he should use up some of these unclaimed dividends, but the Bank made a most terrible row about it and denounced it as robbery. Eventually Mr. Pitt agreed he would split the difference, and that he would have half a million as a loan without interest, and accordingly it was arranged in that way. He said that the matter was to remain in that condition unless the unclaimed dividends should at any time fall as low as £600,000. In 1808 a further advance was made to the Government on very much the same conditions, but in 1816 the Bank appear to have reconsidered their position and to have seen that it was absolutely untenable. An Act was then passed which provided that any stock which had remained unclaimed for ten years should be transferred to the Commissioners for the Reduction of the National Debt. In 1845 similar provision was made with reference to

It is quite impossible to give any fixed scale of the commission charged on American stocks and shares. There is very great competition in this market, with the result that the rates of commission charged are constantly varying.

At the present time there is an agitation going on in favour of an authorized scale of commission being fixed by the Stock Exchange Committee, but that members should be allowed to offer rebates in certain circumstances down to a specified minimum. It appears unlikely, however, that such a rule will ever come definitely into force. In the case of Scotch brokers, there is a fixed scale authorized by the Glasgow Committee, and no member is allowed to charge more or less than such scale. The ruling is that no broker shall be allowed to grant any rebate, not excepting Bankers, Solicitors, or even clerks on his own staff. All the English provincial exchanges have fixed scales of commission also. In England most of the big investors, such as Banks and Insurance Companies, have an agreement with the brokers whereby reduced rates are charged, generally about half of those referred to previously.*

I have now gone through everything on the contract note. On Account Day the cheque is probably sent to the broker, and either on that day or soon after he sends a Deed of Transfer such as that given on the following page.

You will see there is a note at the foot stating that the consideration money mentioned in the Transfer Deed may not be the same as that actually paid by the buyer. The reason of that is that there may have been several transactions with those same shares; they may have been bought and sold several times during the Account. The note, however, is intended to be for the information of the seller; the consideration mentioned is invariably that paid by the purchaser.

* Many persons transact all their Stock Exchange business through their bankers, who, it may be mentioned, always require from the brokers with whom they deal a return of half the commission charged. The members of the Stock Exchange do not object to the Banks getting half commission on their own business, but argue that this should not be allowed in the case of small clients, who otherwise would deal direct with a member of the Stock Exchange. A strong objection is also raised to Solicitors and Accountants getting half commission. Probably a large proportion of the public who deal through their Bankers, etc., do not realise that the latter are obtaining half of the commission paid. Their reason for not dealing direct is in many cases due to their not knowing a Stock-broker. By dealing direct it would certainly seem that some advantage would result; their orders (especially small ones) would receive more attention, and as the business would be more widely spread it is argued that closer and more stable markets would result.

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of Rydal Mount
Potters Bar

hereinafter called the said Transferee

DO hereby bargain, sell, assign and transfer to the said Transferee :-

one hundred Ordinary Shares of
£ each fully paid and numbered
1126200 to 1126299 inclusive

of and in the undertaking called the

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TO HOLD unto the said Transferee, his Executors, Administrators and Assigns, subject to the several conditions on which he held the same immediately before the execution hereof; and the said Transferee, do hereby agree to accept and take the said shares, subject to the conditions aforesaid.

AS WITNESS our Hands and Seals this eight day of December in the year of our Lord One Thousand Nine Hundred and eight

Signed sealed and delivered by the above named
John Brown
in the presence of

Witness's
Signature Henry Jones
Address 24, Dr. Street
Occupation clerk to

John Brown

Signed sealed and delivered by the above named
J. Burns
in the presence of

Witness's
Signature Thomas Peel
Address Windsor Gate Hill
Occupation Cloth Merchant

J. Burns

Signed sealed and delivered by the above named
in the presence of

Witness's
Signature _____
Address _____
Occupation _____

Signed sealed and delivered by the above named
in the presence of

Witness's
Signature _____
Address _____
Occupation _____

*NOTE—The Consideration money set forth in a Transfer may differ from that which the first Seller will receive, owing to sub-sales by the Original Buyer; the Stamp Act requires that in such cases the Consideration money paid by the Sub-purchaser shall be the one inserted in the Deed, as regulating the *ad valorem* Duty; the following is the *Clause* in question:—

"Where a Person, having obtained for the purchase of any Property, but not having obtained a Conveyance thereof, contracts to sell the same to any other Person, and the Property is, in consequence, conveyed immediately to the Sub-purchaser, the Conveyance is to be charged with *ad valorem* Duty in respect of the Consideration for the Sale by the original Purchaser to the Sub-purchaser."

[83 & 84 Vict. cap. 97 (1870), Clause 74, Section 3, of the Schedule]

If the a Transfer is submitted and if Great Britain it is recommended that the Signatures be attested by H.M. Consul or Vice-Consul, a Clergyman, Magistrate, Notary P. M., or by some other person holding a public position—as most Consular refuse to recognize Signatures not so attested

SEVENTH LECTURE.

Stock Exchange Securities.

THE subject of this and of the four succeeding lectures is Stock Exchange Securities, and I shall not assume that my readers have even an elementary knowledge of the subject. I shall not, however, repeat such information as I have given in previous lectures dealing with the National Debt and the Bank of England.

The first thing which one would naturally ask is: What is the Stock Exchange as known in London? The Stock Exchange is an Institution formed for the purpose of dealing in Stocks and Shares of Public Companies, &c. Originally this dealing, or "Stock Jobbing" as it was called, took place in the Bank of England itself, which, by virtue of its first charter had the privilege of selling "any goods, wares, or "merchandises whatsoever, which shall really and bona fide "be left or deposited with the said Corporation for money "lent or advanced thereon, or in lending or advancing any "of the moneys of the said Corporation and taking pawns or "other securities for the same." It was also provided that the capital stock and interest could be transferred from one holder to another.

As time went on, however, the dealers in public securities were forced to seek other quarters, as their continually increasing business was found to interfere with the more important affairs of the Bank. After leaving the Bank they met in "Change Alley," then in "Sweetings Alley," and eventually, in 1801, a proper building for transacting business was erected in Capel Court.

The present House, however, was not opened until 1854, since which time it has been further extended and enlarged

until it has become a very considerable building. As most of you are aware it is situated in the centre of a number of other buildings just by the Bank of England, and bounded by Bartholomew Lane, Throgmorton Street, and Threadneedle Street.

The Stock Exchange is the property of its Shareholders, who, in addition, must be members of the Exchange, or "House," as it is generally termed, no outsiders being allowed to hold shares, with the exception of those proprietors who acquired them before 31st December, 1875. It has a capital of 20,000 shares of which £12 per share (£240,000 in all) has been paid up, but there is no limit to the amount of liability on the shares, except that calls must not be made at more frequent intervals than a year, or for a greater amount at a time than £2 per share.

There are two debenture issues which are available for the general public, one at 3 per cent., of which the total authorized issue was £450,000 but the actual amount in existence at the present time is £431,400, the other a 4 per cent. issue of £50,000, of which the amount actually in existence is £43,500.*

These two debenture issues rank *pari passu* as regards security, that is to say one issue does not rank before the other; they rank equally. They are not secured by any mortgage, but merely by what is called a floating charge. When considering the security for any debentures, one of the first things to notice is whether they are secured by way of mortgage on any property, because that is generally considered the best security. A floating charge only gives the debenture holders the right to be paid out of whatever assets are available. At the time when the floating charge is created there may be valuable freehold property forming part of the security, but since there is no specific charge there is no guarantee that the same property will be available at some future time.

The government of the Stock Exchange is vested in two bodies, the "Managers" and the "Committee for General Purposes." First, as regards the Managers; they are, I suppose what would be more generally referred to as Directors, because they exist for the purpose of safeguarding

* Since this lecture was delivered the Stock Exchange Authorities have given notice of their intention to redeem this issue.

the rights and privileges of the shareholders; they appoint various officials, control the moneys, fix the admission charges for new members to the House, and superintend all matters in connection with the building, supplies, and so on. There are nine managers in all, three of whom periodically retire, when three more are elected by the shareholders. The Committee for General Purposes, as distinct from the Managers, regulates the actual stock broking business in the House itself. It makes, modifies, or rescinds the Rules, expels or suspends members when necessary, and if called upon settles any disputes which may arise. The Committee consists of a Chairman, a Deputy-Chairman and twenty-eight members (thirty in all), who are elected by the members of the Stock Exchange. The Committee hold office for one year only, and one of their duties is to admit and re-elect such persons as they shall deem eligible to be members of the Stock Exchange for one year.

I have already mentioned that there are two kinds of members of the Stock Exchange—jobbers and brokers. The jobbers form the more numerous class, and I shall explain later the difference between the two classes. One important point in reference to the Stock Exchange is that it does not recognize any transactions except those made by its own members and strictly in accordance with the rules. If a transaction has been so carried out the Committee consider that it comes within their jurisdiction, and they attend to it. I may here say that it is certainly always advisable to deal with a member of the Stock Exchange, as by so doing one is safeguarded in many ways. It is fairly easy to find a reputable member of the Stock Exchange, in whose hands you may feel quite safe. There are, as you are probably aware, a large number of outside brokers, and I have no doubt most of you at various times have had circulars from them advertising shares for purchase or sale. I believe there is hardly a morning but what I receive some circulars in which an outside broker, or “bucket-shop keeper” as he is often called, offers to sell me various stocks and shares. The prices at which they are offered, I cannot say always, but I can certainly say in most of the cases, where I have taken the trouble to examine them, have been much in excess of what I could obtain them for through a member of the Stock Exchange. Very often the shares so offered are those for which there is not

a free market, and it is somewhat difficult to check the prices, while it sometimes happens that the shares delivered are unquoted or unsettled, and therefore bad delivery. (The meaning of these terms will be explained subsequently.) In many cases it is quite evident that an outside broker cannot deal so economically for his client as an inside broker. For instance, an outside broker is often obliged to pay a commission to a member of the Stock Exchange in order to execute his client's order, and consequently, in effect, the charges for commission are practically doubled. Then again, a purchaser from an outside broker can obtain no redress, even though the price charged may have been considerably in excess of the market quotation. With an authorized member of the Stock Exchange, this unsatisfactory state of affairs is quite impossible. An important difference to be noticed between an outside broker and a member of the Stock Exchange, is that while the former is the principal in the transaction and actually buys from and sells to you direct, the latter merely acts as your agent, and does business for you with a third party, *i.e.*, the jobber. When a member of the Stock Exchange acts for you he undertakes your business, and as your agent must act to the best of his ability in your interest.

There are several other things in the rules of the Stock Exchange which it is useful to remember. For instance, no member is allowed to carry out speculative business for or with officials or clerks in public and private establishments without the knowledge of their employers. Although what is known as the "cover system" is not, I believe, actually prohibited by the rules of the Stock Exchange, yet it is far more usual amongst outside brokers (that is, brokers who are not members of the Stock Exchange). Without entering into a lengthy explanation of the various ways in which speculative business is carried out, I will here explain that the cover system is a method by which a speculative account is arranged with a limit as to possible loss. For instance, a sum of £50 may be deposited with a broker on the understanding that certain stocks or shares shall be bought for you, the total value of which may be £5,000, so that the deposit represents merely a "cover" of 1 per cent. Should the price rise a profit is made which you may eventually receive if advantage is taken of the opportunity to sell. On the other

hand should the price fall 1 per cent. (the amount of the cover), the broker will at once sell the stock. There are many ways in which speculative accounts may be arranged on a cover system, but further details are unnecessary for our purposes, and I will merely add that in a very large number of instances, even where a profit has apparently been made, the operator fails to obtain it. There are a great many more points in reference to similar gambling transactions, for such they really are, but I will not stop to speak of them now.

Another function of the Committee is to arrange on what days the Exchange is to be closed. There are the usual Bank Holidays and New Year's Day, and the House is automatically closed on 1st May and the 1st November in each year. These two latter holidays originated, I believe, in the fact that the Bank of England used to close its books for transfers on those days, and as practically all the business at that time consisted in stocks connected with the Bank of England, it was quite impossible for the Exchange to carry on business. I was looking up recently in an Encyclopædia (one used even now, although it was published in 1842) the word "Stock Exchange," and under that heading I found there were sixteen Stock Exchange securities set out. The number has grown so tremendously in recent years that it is difficult to realize that less than 70 years ago there were so few marketable securities. You can understand that in those days when the Bank of England books were closed, a holiday was practically necessary, but the members are not averse to holidays, and although the cause has vanished, the holidays are still retained. From time to time the Committee proclaim other holidays as they think necessary.

In *The Times* of the 1st of February, 1909, there appeared a short article on the new Stock Exchange rules, which I think may be usefully reproduced :

THE NEW STOCK EXCHANGE RULES.

(FROM A CORRESPONDENT.)

Six months ago the Committee for General Purposes passed and confirmed several new rules which were framed to deal with the breach of the letter of Rule 75 and the spirit of the unwritten law of the Stock Exchange, that a broker should not make prices and a dealer should confine his business relations to members of the House, and leave all transactions with the public to the broker. These new regulations take effect from to-day, February 1. Rule 75, which was the only one in the code which made any provisions on these points, was embodied in the regulations of the Stock Exchange in 1879. Its introduction

followed the inquiry of a Royal Commission into the methods of business as transacted by Members, when the system of dealers and brokers with distinct spheres of operation was approved of as conducive to the best interests of the public. But since that time, owing to the introduction of the telephone and the activity of company promoters, dealers have gradually obtained a large share of the business between London and country exchanges, and in many cases have had transactions with financiers and others who control large blocks of stocks and shares without the intervention of a broker. Brokers encroached on the privileges of the dealer by making prices in such stocks as he or his clients were largely interested in, until it became apparent that Rule 75, which read "Members or their authorized clerks may not act in the double capacity of brokers and dealers," was becoming a dead letter. There arose much dissatisfaction among brokers, who found that the business they had been in the habit of doing for members of country exchanges was being filched by dealers, while many dealers, who desired to uphold what they had always regarded as the strict law, found that others were openly infringing that law with impunity and profit.

ACTION OF THE MEMBERS' ASSOCIATION.

Commencing with a meeting of a few brokers to consider this development there grew up a body known as the Stock Exchange Members' Association, which has now attained a very considerable membership of both brokers and dealers. The policy of the Association is contained in three articles of faith—the abolition of double commission, *i.e.*, brokerage from both parties in a transaction carried through between non-members, the distinction between brokers and dealers, and the fixing of a *minimum* or authorized scale of commission. In order to further the advancement of this policy the association carried on a vigorous campaign last March at the annual election of Members to serve on the Committee for General Purposes for the ensuing year to such good purpose that their nominees were elected *en bloc*. After five months spent in inquiry and deliberation the new Rules were elaborated. Rule 75 was somewhat strengthened in language as follows: "No Member or authorized Clerk shall carry on business in the double capacity of broker and dealer," and five sub-rules added:

75 *a*. A broker shall not make prices or otherwise carry on the business of a dealer. He shall not carry on shunting business: nor shall he carry on arbitrage business except as authorized under Rule 75 *e*.

75 *b*. A broker shall not receive brokerage from more than one principal on a transaction carried through directly between two principals, and the contract notes shall state that the bargain has been done between non-members.

75 *c*. A broker shall not execute an order with a non-member, unless thereby he can deal for his principal to greater advantage than with a member. In such cases he shall not receive brokerage from such non-member, and the contract notes shall state that the bargain has been done between non-members.

75 *d*. A dealer shall not deal for or with a non-member. He shall not carry on shunting business; nor shall he carry on arbitrage business except as authorized under Rule 75 *e*.

75 *e*. Subject to annual authorization by the Committee a Member, whether broker or dealer, may carry on arbitrage business outside the United Kingdom with a non-member, but a broker so authorized shall not make prices or otherwise carry on the business of a dealer, and a dealer so authorized shall not act as an agent by executing orders for such non-member.

"Shunting," that is, dealing simultaneously or as nearly so as possible between London and a provincial exchange on a profit-and-loss-sharing arrangement, is absolutely prohibited. Transactions for members of country Exchanges must now be done by brokers, who will receive a commission, or conversely employ a provincial broker to execute their orders; while "arbitrage" or "shunting" between London and a foreign exchange, is to be permitted under certain limitations. The broker is forbidden to poach on the dealer's preserves by making prices, and the dealer must have no transactions with non-members.

OPPOSITION TO THE CHANGE.

These new regulations have not, of course, been instituted without considerable opposition. They were strenuously opposed by those whose business would, presumably, be injured by them, while many, who regarded the whole

matter more or less academically, feared that they were reactionary in tendency and calculated to put restraint on business facilities. It was suggested as an amendment that all distinction between broker and dealer should be abolished and that every member should be free to carry on business in any method he chose. It may be presumed, however, that the new arrangements represent the views of the majority, but, in order to enable those whose business would undoubtedly require reorganization to put their houses in order, the rules were not made operative for six months. That period now expires, and to-day the new régime comes into force. To conform to the requirements of the new state of things most of the "shunting" dealers are registering themselves as brokers, and generally they seem to consider, or at any rate give forth that it is their opinion, that they are well satisfied with the change, in spite of their extremely vigorous opposition to the arguments of the Members' Association. In some cases firms have divided, part continuing in business as dealers, while the others propose carrying on, as brokers, that part of the business which is forbidden them as dealers.

POSITION OF BROKERS.

The competition for business between brokers will be keener, but at least it will be open competition. To the public generally there will be no appreciable change, for their business, as hitherto, will be done through their brokers. There were rumours at one time of a combination to form another stock exchange where a Committee might be more indulgent, but it seems likely that Throgmorton Street will continue to be the mart in stocks and shares recognized by those of the public, investors, and speculators who prefer to pay one commission to the Stock Exchange instead of two to a firm of outside brokers.

There is also a useful reference to these new rules in the January (1909) number of the *Investors' Monthly Manual*. This book, of which most insurance offices have a copy, contains various particulars as to prices, dividends, &c., and anyone who is not already familiar with it should certainly make a point of carefully examining it; and, moreover, the short articles at the commencement, which deal with current events, are always worth reading.

I will now more fully explain what are the precise functions which jobbers and brokers fulfil, and how they differ. First as to jobbers. You must understand that for any stock which is held by a large number of people it is a very great advantage to have what is called an "open market." One of the most important advantages of Stock Exchange securities is that it is possible to sell well-known stocks and shares at once. You simply send to your broker and say: "Sell me so much of a certain stock," and, without any delay or trouble, your business is transacted, provided the price obtainable is one you are prepared to accept. Supposing, on the other hand, that you own a house or some other kind of property. When you want to sell, you probably think about it for a considerable time, and then endeavour to ascertain whether it is possible to sell it, and, if so, who will be the most suitable person to act for you. It is

quite a different thing with marketable securities on the Stock Exchange. In order to keep that open market some machinery is essential, and the machinery that is adopted in England is this system of jobbers. A jobber offers, theoretically at least, to buy or sell certain securities at any time. One jobber keeps to one market, and another to another. It is, for instance, unusual for the same jobber to deal in both Mining Shares and Consols; he would only deal generally in one class, and in that particular class would probably confine his attention to a certain number of securities in which he would "make his book." He is supposed to be quite ready for anyone who comes either to buy or sell. Now I want to show you how these jobbers act. Suppose, for instance, I employ a broker to buy for me 100 shares, the price of which I know to be about £5 each. My broker says to the jobber, "What is the price of — shares?" The jobber says, " $4\frac{3}{4}$ – $5\frac{1}{4}$," whereat the broker replies, "No good." If the jobber will not make a closer price, the broker will go to another jobber and perhaps he eventually obtains a quotation of $4\frac{7}{8}$ – $5\frac{1}{8}$. Now, the jobber does not know whether the broker is going to ask him to buy or sell, and this is the reason why he is obliged to quote two prices. Consider yourself in the jobber's position. Perhaps you have only just bought 500 of these shares, and are sincerely hoping for the opportunity to sell 100 of them, and, when the broker "opens" to you (which is the term applied to disclosing the intention to buy or sell) that he will sell you 100 at $4\frac{7}{8}$, you will very likely make up your mind that the next broker who comes to you shall have a quotation of $4\frac{3}{4}$ –5, although you will very probably again start business with a quotation of $4\frac{3}{4}$ – $5\frac{1}{4}$. If you (the jobber) know that the shares are quite good and that there is a fairly free market (*i.e.*, plenty of buyers and sellers), you will not be alarmed, even though it may so happen that several brokers who come to you one after the other all prove to be sellers. You will not alter the quotation, because you will be confident that, sooner or later, the brokers will come wanting to buy; and the difference in the price at which you are willing to sell will compensate you for any risk and loss of interest. You notice that I say "compensate for risk." What risk? The risk of the price of the shares actually being forced down by a persistence of sellers and absence of buyers. In

theory, at all events, the absence of jobbers would cause much greater fluctuations in prices. A few sellers coming on the market and failing to find buyers would be forced to lower their price until they did tempt buyers; or, on the other hand, a few buyers appearing when there were no sellers would have to call advanced prices until they tempted someone to sell.

The jobber's function is therefore to keep an open market; he steps in and takes the place of buyer or seller. He may have to buy the stock and hold it for some considerable time before he has an opportunity of selling, and even then may have to sell at a loss. On the other hand, he may have to sell stock which he does not possess and run the risk himself of having to buy it at a higher price later on. He thus runs a risk for which he compensates himself by means of the difference in his buying and selling price, usually referred to as the "turn." You will now, I think, be able to understand why it is that some stocks and shares should be quoted at a very close price and others at a comparatively wide one.

If a stock is constantly dealt in and there is nothing to alarm either buyer or seller, the jobber will run very little risk in quoting close prices, for he will know that he can soon "even up" his book. But if a stock is seldom dealt in, he will know that he must expect some time to elapse before he can even up his book, and the longer this probable time is, the greater the risk of fluctuation in price and the larger his loss of interest and attendant expenses. Again, another cause for a wide price will, of course, be any excitement (favourable or otherwise) which may cause fluctuation in prices. It occasionally happens that so disturbed is the market dealing in some particular stock or share that the jobber actually refuses to make a price, and asks the broker to state his case (*i.e.*, say whether he is a buyer or a seller). This disclosure of the nature of the business proposed, as already explained, is known as "negotiating" the broker, having "opened" to the jobber.

You have perhaps noticed that when first referring to jobbers I was careful not to state that they were indispensable and, although all the terrible things which I have referred to might happen in their absence, I am bound to admit that they do not invariably so happen in markets where jobbers are

unknown, such as Scotland, Germany, &c. However, I think I have said quite enough for Part II students with reference to "jobbers."

Now as regards brokers. Their business is simply and solely to buy and sell for their clients, and to arrange all the attendant transactions. The duties of a broker will, I think, be best understood by following out a simple buying order from start to finish. Suppose you want to buy 100 Lipton's Ordinary £1 Shares. You probably write or telephone to your broker telling him that you wish to buy these shares, at the same time stating the price to which you are prepared to go. The next morning you will receive a contract note setting forth the various details of the transaction. I have a specimen of the contract note here:— (*see* p. 140.)

First comes the name of the broker who acts for you, then his address, and then the date. Then "Purchased for Account of J. Burn (subject to the Rules and Regulations of 'the London Stock Exchange')." The next thing to notice is that they are purchased for the account, and at the bottom of the form you will see that it is stated that the account day is 14th May, 1908. This is the day on which a broker must receive payment from you (although there is not, of course, anything to prevent you forwarding the amount before that date if you wish to do so). You should also notice the statement as to the necessity of remitting cheques on country banks three days in advance owing to the time taken in clearing them. The broker generally protects himself by putting E. & O. E. (errors and omissions excepted) against the total amount due to him.

These account days occur twice a month, and on such day the purchaser is supposed to pay the money over to his broker in order that he may be in a position to pay for the shares when they are delivered to him, which, of course, may not be for several days.

[NOTE.—The usual expression is "To put your broker into possession of funds to take up stock on pay day."]

The rule is that delivery should be made within ten days, but occasionally a much longer time elapses. It is seldom that a purchaser insists upon the prompt delivery within 10 days. He does not stand to lose anything by the non-delivery, since any dividends payable must be duly handed over to him, and if, as is often the case, it has been

STOCK AND SHARE BROKER.

STOCK EXCHANGE,
LONDON.

ST. STEPHEN'S CHAMBERS, TELEGRAPH STREET,

Purchased for Account of J. Burn, Esq.

LONDON, E.C. 5th May 1908

(Subject to the Rules and Regulations of the London Stock Exchange.)

100 Lipton's £1 Ordinary Shares at 25/6

Stamp Duty on Transfer

Contract Stamp

Fee for Registration of Transfer

Commission 6d. per Share

127	10	0
	15	0
	1	0
	2	6
2	10	0

140

5th May '08

Signed.....
Member of the Stock Exchange, London.

£ 130 : 18 : 6

Account Day 14th May '08.

£. s. d. £.

Cheques on Country Banks should be forwarded three days prior to the settling day.

agreed that no payment shall be made until delivery, he is still entitled to any dividend, and in addition retains the use of his money. By the regulations of the Stock Exchange the purchaser can require his broker to enforce delivery, which he does by applying to the "Buying In and Selling Out" department, whose duty it is to buy or sell as the case may be in the open market. In practice any attempt to buy in stock is attended with considerable difficulty. The jobbers recognize that one of their own class is being needlessly penalized and refuse to assist in the operation.

You may, naturally, ask whether it is advisable to pay the broker before he can deliver to you (that is, before he can hand you the Bonds or Deeds of Transfer, as the case may be). I think that a private individual who is buying should, and generally does, have such complete confidence in his broker that he will not willingly cause any extra trouble and expense by refusing to pay until actual delivery. In the case of very large transactions, however, such as those often made by big Insurance Companies, every possible precaution is, of course, justifiable, and if the broker cannot conveniently attend at the office, all difficulty will be avoided by arranging with one's *Banker* to pay as soon as the *Broker* can deliver.

I will here explain that the system of semi-monthly* and monthly accounts affords an opportunity for speculation which is taken advantage of to a very large extent. It is quite possible for you to purchase stocks or shares at the beginning of an account at a certain price and a few days afterwards, if the price rises, you can then send to your broker with instructions to sell. The result is that, having bought and sold within the same account, a profit has been made, although no money has actually passed until such profit has been remitted, and in addition, payment of stamp duty is avoided. In the same way, should a loss be sustained, the speculator will be required merely to remit the difference. You will also readily understand that a similar speculative transaction within one account may be carried out by means of a sale first and a purchase after, in which case a *fall* in the price will result in a profit.

I will now say a few words concerning each of the other items mentioned in the contract note.

* These are often referred to as fortnightly accounts, but this is not strictly correct; there are two accounts every month, and the longest period between two account days is nineteen days.

In the first place, the Government Stamp Duty charged on transfers is at the rate of $\frac{1}{2}$ per cent., but for any amount between £100 and £125 the stamp is 12s. 6d., and between £125 and £150 it is 15s. In this case, the consideration being £2. 10s. over £125, the stamp is 15s. Stamp duty is nominally 10s. per cent., or, rather, 5s. per fifty or fraction of fifty pounds. This rate, however, does not apply where the total consideration money is less than £300, as the amounts are taken at smaller intervals. The complete scale for all sums up to £10,000 is given in the *Stock Exchange Official Intelligence*, to which I would refer you. There are also certain exceptions to this general rule, which it is as well to notice.

1. Stock of the Bank of England. The stamp duty is 7s. 9d. on any amount.

2. Stock of the Government of Canada inscribed in books kept in the United Kingdom, or of any Colonial Stock to which the Colonial Stock Act of 1877 applies, the stamp duty is 2s. 6d. per £100 nominal, or fraction of £100. I must point out that this amount is only payable in a very few isolated cases, as the duty is generally paid by the issuing Government by way of "composition." I shall refer to this more fully later when dealing with inscribed stocks.

3. Transfers of Stocks or Shares not on sale, that is where the consideration is merely nominal (say 5s.), or where the transferor gives the transferee a consideration to take the shares from him, involve a duty of 10s.

You must understand that these Stamp Duties very largely influence the amount of business done in this country. London is a great centre for dealing, and the result is beneficial to an almost unknown extent. Bonds in this country are subject to a duty of 10s. per cent., whereas in Paris the duty is £2 per cent., and this difference has a very great effect on the number of new loans issued over here. An issue of Bonds, perhaps, is about to be made, and the question arises whether it shall be placed in Paris, or in London. If the Bonds are issued in London, the duty is not nearly so much, and you may be pretty certain you may be able to sell a lot in Paris as well, but if you issue in Paris, there is the £1. 10s. per cent. extra to be paid on each Bond.*

^ The next item on the contract note is "Contract Stamp 1s." Had the consideration been less than £100 that stamp

* But see Finance Bill, 1909.

would have been 1*d.*, and I should not have been charged with it, as it is usual to include it in the expenses only when it is 1*s.**

Then there is the fee for registration of transfer, 2*s.* 6*d.*. That fee is paid to the Company for their trouble in transferring the stock, filling in the new name in their registers and issuing a certificate. The usual, but not the invariable, charge is 2*s.* 6*d.*, which is in accordance with what is known as "common form." The fee chargeable in any particular case can be readily ascertained by reference to *Burdett* or the *Stock Exchange Year Book*, where it will be seen that in the particulars given for every Company, &c., there is a small paragraph headed "Transfer Arrangements."

You will notice that the commission (or brokerage) charged by the broker is at the rate of 6*d.* per share. There is no official rate of commission to brokers in this country, but a maximum scale often referred to, is that which was not long since agreed to by some of the leading banks. This is as follows:—

British, Indian and Foreign Government

Securities	$\frac{1}{8}$ th per cent.
Colonial and Municipal Securities	$\frac{1}{4}$ "
Debenture Bonds and American Bonds	$\frac{1}{4}$ "

The above rates are calculated on the nominal amount of Stock or Bonds.

British and Foreign Registered Stocks $\frac{1}{2}$ per cent. on money.

British and Foreign Shares are treated as follows:—

	£	s.	d.		£	s.	d.		s.	d.
Under	0	10	0	per share	.	.	.	0	1½	per share.
Over	0	10	0	and under	1	5	0	.	0	3
"	1	5	0	"	3	10	0	.	0	6
"	3	10	0	"	5	0	0	.	0	9
"	5	0	0	"	7	10	0	.	1	0
"	7	10	0	"	10	0	0	.	1	3
"	10	0	0	"	15	0	0	.	1	6
"	15	0	0	"	20	0	0	.	2	0
"	20	0	0	"	25	0	0	.	2	6
	25	0	0	and upwards	.	.	.		$\frac{1}{2}$	per cent. on money.

* See Finance Bill, 1909.

It is quite impossible to give any fixed scale of the commission charged on American stocks and shares. There is very great competition in this market, with the result that the rates of commission charged are constantly varying.

At the present time there is an agitation going on in favour of an authorized scale of commission being fixed by the Stock Exchange Committee, but that members should be allowed to offer rebates in certain circumstances down to a specified minimum. It appears unlikely, however, that such a rule will ever come definitely into force. In the case of Scotch brokers, there is a fixed scale authorized by the Glasgow Committee, and no member is allowed to charge more or less than such scale. The ruling is that no broker shall be allowed to grant any rebate, not excepting Bankers, Solicitors, or even clerks on his own staff. All the English provincial exchanges have fixed scales of commission also. In England most of the big investors, such as Banks and Insurance Companies, have an agreement with the brokers whereby reduced rates are charged, generally about half of those referred to previously.*

I have now gone through everything on the contract note. On Account Day the cheque is probably sent to the broker, and either on that day or soon after he sends a Deed of Transfer such as that given on the following page.

You will see there is a note at the foot stating that the consideration money mentioned in the Transfer Deed may not be the same as that actually paid by the buyer. The reason of that is that there may have been several transactions with those same shares; they may have been bought and sold several times during the Account. The note, however, is intended to be for the information of the seller; the consideration mentioned is invariably that paid by the purchaser.

* Many persons transact all their Stock Exchange business through their bankers, who, it may be mentioned, always require from the brokers with whom they deal a return of half the commission charged. The members of the Stock Exchange do not object to the Banks getting half commission on their own business, but argue that this should not be allowed in the case of small clients, who otherwise would deal direct with a member of the Stock Exchange. A strong objection is also raised to Solicitors and Accountants getting half commission. Probably a large proportion of the public who deal through their Bankers, etc., do not realise that the latter are obtaining half of the commission paid. Their reason for not dealing direct is in many cases due to their not knowing a Stock-broker. By dealing direct it would certainly seem that some advantage would result; their orders (especially small ones) would receive more attention, and as the business would be more widely spread it is argued that closer and more stable markets would result.

Matthews, Dwyer & Co.,
Law Stationers &
Printers, 27 & 28 High
Holborn, London, W.C.

Stock forwarded to the Company's Office by

Convey for £

I, John Brown, Merchant
of 10 James St. E.C.

in *consideration of the sum of one hundred and
twenty seven pounds ten shillings
paid by J. Burns, Actuary,
of Rydal Mount,
Potters Bar.

hereinafter called the said Transferee

DO hereby bargain, sell, assign and transfer to the said Transferee :-

one hundred Ordinary Shares of
£ each fully paid and numbered
1126200 to 1126299 inclusive

of and in the undertaking called the

Lipton, Limited

TO HOLD unto the said Transferee, his Executors, Administrators and Assigns, subject to the several conditions on which he held the same immediately before the execution hereof; and the said Transferee, do hereby agree to accept and take the said shares, subject to the conditions aforesaid.

AS WITNESS our Hands and Seals this eight day of December in the year of our Lord One Thousand Nine Hundred and eight

Signed sealed and delivered by the above named
John Brown
in the presence of

Witness's
(Signature Henry Jones
Address 24 Dr. Street
Occupation Clerk to)

John Brown

Signed sealed and delivered by the above named
J. Burns
in the presence of

Witness's
(Signature Thomas Peel
Address Madgate Hill
Occupation Cole Merchant)

J. Burns.

Signed sealed and delivered by the above named
in the presence of

Witness's
(Signature
Address
Occupation)

Signed sealed and delivered by the above named
in the presence of

Witness's
(Signature
Address
Occupation)

*NOTE.—The Consideration money set forth in a Transfer may differ from that which the first Seller will receive, owing to sub-sales by the Original Buyer; the Stamp Act requires that in such cases the Consideration money paid by the Sub-purchaser shall be the one inserted in the Deed, as regulating the ad valorem Duty: the following is the Clause in question:—

"Where a Person, having contracted for the purchase of any Property, but not having obtained a Conveyance thereof, contracts to sell the same to any other Person, and the Property is, in consequence, conveyed immediately to the Sub-purchaser, the Conveyance is to be charged with ad valorem Duty in respect of the Consideration for the Sale by the original Purchaser to the Sub-purchaser."

[RS & St. Vict., cap. 97 (1870), Clause 74, Section 2, of the Schedule.]
[When a Transfer is submitted out of Great Britain it is recommended that the Signatures be attested by H.M. Consul or Vice-Consul, a Clergyman, Magistrate, Notary Public, or by some other persons holding a public position—to avoid Companies refusing to recognise Signatures not so attested.]

Although most of the Joint Stock Companies accept transfers executed on what is known as the "Common Form," namely, that described in the case of the purchase of Lipton's Shares, yet there are many undertakings, mostly of old standing, in which by virtue of their "Articles of Association" or "Deed of Settlement," a "Special Form" has to be used, while others again require it, although not compelled to do so by their statutes. For the most part they consist of Banks and Insurance Companies, and the necessary form is given out on proper application being made, but in some cases it is further necessary to give notice of the intention to transfer shares to the Company, whose own Officials will prepare the deeds.

There are, as you will see, four seals, and against the first of these the Seller, that is the Transferor, has already signed his name, John Brown, which has been duly witnessed by Henry Jones, of Fleet Street. The purchaser will now sign his name, J. Burn, against the second seal, and, placing his finger on the seal, will solemnly in the presence of a witness declare: "I deliver this as my act and deed"—but any other words signifying such intention are sufficient. The witness will then sign his name, giving his address and occupation. I am not going to guarantee that this solemn ceremony always takes place, but I certainly know some gentlemen who always conscientiously carry it out.

Sometimes the transferor or transferee consists of two or more persons; that is, the shares are held in a joint account, as in the case of trustees. The several persons must each sign the deed, and that is the reason why there are more than two seals on the form. Of course it may happen that even then there are not sufficient seals, and in that case more must be added or a fresh form with an increased number obtained. The usual practice is for the broker, when necessary, to prepare spaces for the extra signatures on the back of the form.

You will perhaps be wondering what will happen in the case of a large purchase by an Insurance Company when delivery is by means of a deed of Transfer such as that just described.

The only difference is that the Corporation or Company affixes its "Seal," the use of which is, so to speak, the official signature. This is usually impressed on the transfer

CERTIFICATE No. **082341**

Lodged by, on against the following Transfers:—

[illegible]

LIPTON, LIMITED.

NO 082341
ORDINARY
SHARE CERTIFICATE
NUMBER OF SHARES
122600 122600



INCORPORATED IN THE COMPANY LIMITED BY SHARES
CAPITAL £2,500,000
DIVIDED INTO
1,000,000 FIVE PER CENT. CUMULATIVE
PREFERENCE SHARES OF £1 EACH.
ENTITLED TO A 7 1/2 PER CENT. PER ANNUM PREFERENCE DIVIDEND ON THE 31ST MARCH AND
ON THE 31ST MARCH IN EACH YEAR IN PROPORTION TO THE ORDINARY SHARES.
1250,000 ORDINARY SHARES OF £1 EACH
NUMBERED 000,001 TO 2,500,000 INCLUSIVE

This is to Certify that Joseph Burn
of Rydal Mount, Potter Lane, Middlesbrough,

is the registered holder of One Hundred
FULLY PAID ORDINARY SHARES of One pound each and is the owner of the above
said Company subject to the Memorandum and Articles of Association thereof.

GIVEN under the Common Seal of the said Company
this eighteenth day of September 1923

Angela Cantor
Secretary



deed with the authority and in the presence of either one or two Directors, who sign the document, which is then signed by the Secretary of the Company. Although this is generally done, however, the mere affixing of the seal of a corporation is all that is really necessary to make the transfer effective and no witness (as in the case of a private person executing a transfer) is required to the act.

A forged transfer confers no rights on the alleged transferee, nor does the fact of a company issuing to him a certificate which acknowledges him as a shareholder do so. A subsequent purchaser, however, who relies upon this certificate and not on the forged transfer, is entitled to damages for any loss he may suffer in consequence. Let me try to explain this a little more fully. Suppose A and B are trustees holding £1,000 of stock in their joint names for the benefit of C. B, without A's knowledge, obtains the stock certificate and sells the stock to D, forging A's signature on the deed of transfer. D, who has purchased in perfect innocence, has no legal title, owing to the forged signature. Now, in such a case as this, who should be the loser? It is manifestly unjust that C should suffer, and if D is to lose, how is any *bond fide* purchaser for value ever able to be certain that he has made a good purchase? In order to overcome this awkward difficulty Acts were passed in 1891 and 1892, entitled the "Forged Transfers Acts," which permit the company to bear the loss itself where it has adopted the Acts. It can readily be understood that this is a great advantage, particularly in the case of trusts, and consequently those securities so provided for generally command a relatively higher price. For further particulars, I must refer the student to *Burdett*, where the full details are always set out.

Again returning to our supposed purchase of 100 shares, When the transfer form is completed it will be returned to the broker who, after acknowledging same, will not have occasion to write to you again (*i.e.*, about that transaction) until he receives the certificate from the company,* when he will write to ask you whether he shall send it at your own risk through the post or keep it at his office until you call for it. When you receive the certificate you will find that it is generally quite a simple document (*see Inset*).

* The time required is usually from 14 to 21 days.

Of course, in an insurance office any such certificate, after being carefully examined and checked, will be locked up in the safe or deposited with the company's banker for safe custody.

It is usual for the directors or other authority, before issuing a new stock or share certificate to the transferee, to have a notice sent to the transferor informing him of their intention, and thus the latter will be able to raise an objection should any fraud have been committed. The following is an example:—

“SIR,

“I have to inform you that an instrument of transfer, purporting to be signed by you, conveying.....shares in this company to....., has been lodged here for registration, and unless I hear from you to the contrary, per return of post, the said shares will in due course be registered in the name of the transferee.”

Now let us look at the purchase from the broker's point of view. What has he been doing? On receipt of the order he goes to the dealer or jobber in the manner I have previously referred to, and after dealing returns to his office and enters particulars in his bargain book as to date, amount, description, price, jobber's name, client's name, &c. It is from these data that his clerks make out the contract note to be sent to the purchaser. On the day before Account day, that is Ticket day, the broker's clerk makes out what is called a “Ticket,” on which he writes your full name and address, the number and name of shares, and the price. This ticket he gives to the jobber from whom he purchased the shares. Now, very probably the jobber, whom we will call A, purchased the shares from another jobber, B, who in his turn, perhaps, purchased them from C, a broker acting for his client Mr. Brown, mentioned in the Transfer Deed to which we have already referred. The jobber A endorses the ticket and passes it on to B, who again endorses it and passes it on to C, who makes out the Transfer Deed and obtains his client's signature. The broker C then calls on your own broker with the Transfer Deed, Ticket, and Share Certificate, and on handing over the Share Certificate and Transfer Deed, receives a cheque for £127. 10s., that is the purchase price paid by your broker. C then hands to the jobber B the difference due to him (B), or receives it from him as the case may be, and B then goes on

and similarly settles up with A. This is referred to as the "Settlement of Differences." Your broker then forwards the Deed to you for completion in the manner already described. When returned to him he lodges it with the company, to whom he pays the necessary fee and hands over the old certificate. Subsequently (generally in from fourteen to twenty-one days) he calls on the company and obtains the new certificate, which he deals with as already explained. I should mention that it is the selling broker who always buys the stamped deed or has the stamp impressed, and he subsequently claims the cost of the stamp from the buying broker when delivering the transfer.

That I think is a sufficient explanation of what actually takes place from beginning to end in the case of a purchase of shares which are transferred by means of a Deed of transfer on which the stamp duty is at the rate of 10s. per cent. It is quite an ordinary transaction and you ought to be absolutely familiar with all the details, knowing not only what happens to yourself but what happens to the broker, because by so doing you will much more easily understand in what way the various difficulties arise and how they can be overcome.

EIGHTH LECTURE.

Stock Exchange Securities.

(Continued.)

YOU will remember that in describing a purchase of Lipton's shares, I showed how a ticket was handed by the buying broker to the jobber, and after passing through various hands it eventually came to the broker who had originally sold them, but there is another phase of the system which I omitted to refer to, and that is, "splitting the ticket." This occurs in the case of a purchase from the jobber of a large block of shares, which he (the jobber) has purchased in a number of smaller amounts from other dealers or brokers. When the ticket is handed to him by the buying broker he is confronted with a difficulty, viz., how to pass the ticket on to those from whom he has purchased in smaller quantities. This is accomplished by what is known as "splitting the ticket." The jobber makes out a number of tickets for these small amounts, entering up as on the original ticket the name of the purchaser, price, &c., but a different amount. It is a rule of the Stock Exchange that a member splitting a ticket must, on doing so, put the words "split by" before his name, and he must also keep the original ticket in his own possession.

Now this operation in the case of securities conveyed by a deed of transfer results in extra expense. For example, if £100 were the consideration on one ticket, the stamp would be 10s., but if this originated in two amounts of £45 and £55 the stamps would be 5s. and 7s. 6d., that is, 12s. 6d. in all. This extra amount obviously cannot be charged to the purchaser, who will naturally expect to pay on £100, *i.e.*, 10s., and the difference of 2s. 6d. must therefore be borne by the jobber, that is, by the member who splits the ticket.

Again, some extra expense may be incurred in connection with the transfer fees. Each time the name is altered in the register a fee is charged. If the transfer is of one large amount from one seller to one purchaser there will be one fee only, probably 2*s.* 6*d.* If, however, it is made up of a number of separate amounts there will be several fees, and, according to the generally recognized rule, the increased expense is borne by the jobber. On the other hand, in cases where the jobber purchases a large block of stock or shares, which he afterwards sells in smaller lots, there is no difficulty. Each purchaser must pay his own transfer fee and the correct stamp duty. In order to meet the difficulties referred to above, jobbers frequently make special prices to small sellers.

In some few cases, however, it is possible for a slight profit to be made on account of a split ticket. For example, two purchases of stock, one for £297 and another for £4, would involve a total cost of £1. 15*s.* 6*d.*, viz., £1. 10*s.* 6*d.* for stamp and 5*s.* for two registration fees, whereas a purchaser for an equivalent amount, £301, would expect to pay £1. 15*s.* for stamp, and 2*s.* 6*d.* for registration fee, or £1. 17*s.* 6*d.* in all.

INSCRIBED STOCKS.

One of the most important classes of Stock Exchange securities is that known as "Inscribed Stocks." The holder's title for such stock is evidenced by an inscription in the register kept for the purpose by some bank or other agent. A number of the most important of such stocks are inscribed at the Bank of England; in fact, one naturally thinks of the Bank of England when speaking of inscribed stocks. There are, however, many other stocks inscribed elsewhere; for instance, a great many are dealt with at the London, County, and Westminster Bank; and, again, many more are inscribed in the registers kept at the offices of the Crown Agents for the Colonies. When you purchase such stock, you receive no actual certificate as you do with registered stock. You get what is called a "Stock Receipt," but that is really of little or no importance, for, although it is advisable to keep it, it is not necessary to produce it for the purpose of executing a valid transfer. The main advantage of inscription is supposed to be the safety which the method affords. There is no deed or paper to be locked up for protection against fire and burglary, and cases of loss of any

kind are extremely rare. It must not, however, be supposed that inscription actually affords that perfect security with which it is credited by most people. Anyone who carefully considers the matter will see that fraud is by no means impossible, and, therefore, it is advisable to take all possible precautions.

I will now describe what happens when inscribed stocks are bought and sold. A transfer can only be effected by the proprietor or his attorney attending at the bank or other place where the register is kept, and duly signing a form of transfer drawn up in favour of the transferee. The transferee, also, sometimes attends later on, and signs below the transferor, but the transfer is complete (legally) whether he does so or not. I will here take the opportunity of saying that the bank strongly advises that purchasers or their attorneys *should* attend and "accept," thus identifying themselves as the new proprietors. It prevents fraud and gives evidence that everything is in order. In addition, acceptance provides the inscribing bank with the signature of the holder, which otherwise will not be available until the receipt later on of the endorsed dividend warrant, or if dividends are to be paid to a nominee, the signed form requesting such payment.

For the purpose of obtaining confirmation of the amount inscribed in any name, it is provided that on payment of a fee of 6d. per stock where several different stocks are inscribed in the same name in the books of one bank with a minimum fee of 1s., a holder can obtain a receipt showing the amounts inscribed in his name. Most large investors, like insurance companies, make it a practice to send every year to the different banks, enclosing the necessary fees, and asking for such receipts or letters of confirmation as to the amounts standing to their credit in the bank books. In this way a sufficient proof is obtained of the actual amount of holding in these inscribed stocks, and the letters so obtained are generally required by the accountants at the annual audit.

Now I think it will be best to describe a purchase of this kind of stock in the same way as I did that of Lipton's shares at my last lecture. There is no alteration in the method of buying and selling with the jobber, and in due course the "buying broker" passes on a special form of ticket such as the following :

CONSOLS. No.

Bank of England, the day of 19

From

£ £2 : 10s. per Cent. CONSOLIDATED STOCK.

To

(3027)

Examined by

Dr. fol.

Cr. fol.

Transfer Book.

Posted by

Posted by

PLEASE WRITE DISTINCTLY.

This Ticket is put forward by

Stockbroker.

[Reverse side of Ticket.]

[This space is for the names
of the various dealers passing
the Ticket. The first name is
that of the buying broker, then
follows the name of the jobber
from whom he purchased, and
so on through the "trace" to
the selling broker.]

These tickets are supplied by the Bank of England (other banks have very similar ones) ; on the lower half the buying broker fills in the name, &c., of the purchaser and the amount, and against the name and address of the person to whom the stock is to be transferred he will write either :—

- (1) *o/a*, which signifies that the purchaser already has an account in the same stock, referred to as an “old account” and wishes the new purchase to be added thereto.
- (2) *n/a*, which signifies “new account,” that is to say, the purchaser has no existing account in this stock.
- (3) *o/a* or *n/a*, that is, “old account or new account.” This expression must be signed by the broker as it signifies that he does not know whether the purchaser has an old account. In such a case as this the Bank authorities, after looking through their registers, cross out one of the symbols and return the form to the broker. In cases of any doubt, however, they stop the ticket and question the broker.

The purchaser of inscribed stock should invariably inform the broker whether he already has an account in such stock, since failure to do so may cause considerable trouble. Sometimes it is found that a *distringas* has been placed on the stock, and consequently the transfer cannot be made until it has been “warned off.”

The broker then passes the ticket on to the jobber from whom he bought the stock. Sometimes the jobber sells stock which he holds in his own name (properly inscribed in the bank books), and if so, he himself will fill in the top half with his name and address. If he obtained the stock from another dealer, however, he passes it on after duly marking the back of the ticket with his name, and eventually it arrives at the broker who sold the stock, which you will notice is Consols. In this case, then, he will complete the filling up of the form, which now contains :—

The name of the person wishing to transfer.

Amount to be transferred.

Name, &c., of person to whom it is to be transferred.


This form he then lodges with the bank before 1 o'clock, or between 1 and 3 o'clock on payment of a fee of 2s. 6d., in

order that they may prepare their books. Later in the day, having ascertained that the entry is made in the books he attends with the transferor or his duly appointed attorney.* It is not essential that the broker should attend with the seller personally, but the latter must be identified by some person known to the bank, and it generally happens to be the stockbroker. Now the stockbroker acting for the vendor, before attending the bank, has prepared what is known as a Stock Receipt such as the following :—(see p. 157).

These forms are supplied by the bank. As already stated, the stockbroker and vendor now attend at the bank with the stock receipt. Having arrived at the correct department the vendor signs in the space provided at the bottom of the stock receipt, the signature being witnessed by a clerk at the counter of the bank. In the bank books there is practically a duplicate of the stock receipt, and the vendor signs in the same manner, thus indicating that he has assigned his right to some other person—the transferee. The stock receipt is then handed back to the selling broker, who subsequently presents it to the buying broker, and he in turn hands it on to his client, the purchaser. If the latter is wise he will go down to the bank as I have suggested and sign his name under that of the seller in the space provided, and so satisfy himself (and incidentally the bank) that all is in order. When the selling broker hands the stock receipt to the buying broker the latter pays the cash in exchange and the manner in which the various difficulties are settled, and the net sale price remitted to the vendor, is in all respects similar to that already described in the case of the Lipton shares. If, as would generally be the case in transactions with which any of you have to deal, the holder is a large Insurance Company—a Corporation with a seal—sales of stock would be transacted by means of a power of attorney. Any stockholder can transfer in this way (it is chiefly employed by those residing in the country), and I think it is advisable you should see exactly what takes place in such cases. You must first obtain a form from the Bank of England such as this :—(see p. 159).

* Transfers must be executed between 11 a.m. and 3 p.m. on Monday, Tuesday, Wednesday, Thursday, or Friday, and on Saturday between 11 a.m. and 12.30 p.m. on payment of a fee of 2s. 6d. It is advisable to strictly keep any appointment made for transferring stock, as it is the Bank's practice to make void all transfers not executed by 3 o'clock, which results in considerable trouble and delay on a subsequent day.

£2 : 10s. per Cent. CONSOLIDATED STOCK.

 This Receipt is of no negotiable value. Stockholders, to protect themselves from FRAUD, can ACCEPT by themselves or their Attorneys all TRANSFERS made to them.

See back.

£ s. d.

RECEIVED this Day of 19 of

Transfer Days:

Monday,

Tuesday,

Wednesday,

Thursday,

Friday,

Holidays excepted.

hereinafter called the said Transferee the Sum of

being the Consideration for

Interest or Share in the Capital of the Two POUNDS TEN SHILLINGS PER CENTUM CONSOLIDATED STOCK, forming part of The National Debt, transferable at the BANK of ENGLAND, and all property and interest in and right to the same, and the Dividends thereon, by this day transferred to the said Transferee

Witness Hand

Witness

Broker's Name and Address is impressed here with india-rubber stamp.

(3026)

Should it be desired that the Dividends be paid in some way other than by post to the FIRST, OR SOLE, STOCKHOLDER—which is done without application—the necessary instructions must be lodged AT ONCE at the Bank.

Fresh instructions are not required upon an alteration in the amount of an existing account.

[Reverse side of Stock Receipt.]

NOTICE to Holders of £2 : 10s. % Consolidated Stock.*(Redeemable by Parliament on, or after, 5th April, 1923.)*

See other Side. { Should it be inconvenient to Stockholders to attend at the Bank to accept Stock, they can obtain a confirmation of the fact of the inscription of the within-mentioned sum of Stock by forwarding this document, with a request for confirmation and a Postal Order for 1s., to the Chief Accountant, Bank of England, E.C.

Dividends are due and payable on and after the 5th January, 5th April, 5th July, and 5th October (unless any of these days fall on a Sunday, or Bank Holiday, in which case they will be payable on the business-day next following), and will be paid in one of the following modes:—

(a) By Transmission of the Warrants by Post—

Without Application :

To Sole or First Stockholders in the absence of any instructions to the contrary. (Sole Stockholder includes Sole Surviving Stockholder, Sole Executor or Administrator, and Sole Surviving Executor or Administrator. First Stockholder includes the First Executor.)

Upon Application :

To any Stockholder, Executor, or Administrator, other than the Sole, or First, Stockholder, Executor, or Administrator, or to any Person, Firm, or Company, upon the written Request, in the prescribed form, of all the Stockholders, Executors, or Administrators.

(b) Dividends will be paid to any Stockholder, Executor, or Administrator, *personally attending at the Bank*, on his written Request, in the case of a Sole Account; or on the written Request of all the Stockholders, Executors, or Administrators, in the case of a Joint Account. The Request in either case must be in the prescribed form.

Forms of Postal Request can be obtained at the Bank of England, at any of their Branches, or at any Money-Order Office throughout the United Kingdom.

Postal Dividend Warrants will be crossed "& Co.," and must therefore be presented for payment through a Banker. The Bank cannot undertake to cross a Warrant payable to a Banker with the account to which the Dividend is to be placed. The Stockholder must himself instruct the Banker.

Persons who receive Warrants by Post, should give notice to the Bank if they are NOT received on the day on which they ought to be delivered; but need not acknowledge those that arrive in due course.

Forms of Request, for the receipt of Dividends on Personal Attendance, can be obtained on application at the Dividend Office, Bank of England.

Under the provisions of the National Debt Acts, Stock and Dividends unclaimed for 10 years are transferred to the Commissioners for the Reduction of the National Debt, but may be reclaimed by the persons entitled thereto.

Communications relative to £2:10s. per Cent. Consolidated Stock should be addressed, postage prepaid, "The Chief Accountant," Bank of England, London, E.C.

STOCK CERTIFICATES to Bearer, of the denominations of £100, £200, £500 and £1,000, with Coupons for the Quarterly Dividends attached, may be obtained in exchange for inscribed Stock.

[In Survivorship Accounts the ORDER of the Names in the Bank Books must be stated.]

APPLICATION for POWER OF ATTORNEY in *

Names of Party applying for Power.	Residence.
(Broker's Name and Address.)	
Names of Stockholders.	Residence & Quality or Occupation as in Bank Books.
From †	When the address registered in the Bank Books is not the present address the last r must be given here.

To † (Selling Broker.)

For the purpose of §

Powers of Attorney applied for before 12.30 p.m. (Saturday 10.30 a.m.), will be considered for the day following the day on which they are presented. They will, however, be ready the same day if applied for by 2 p.m. (Saturday 11 a.m.) on payment of a fee of 2s. 6d. each. Applications made through the Post cannot be attended to. Powers presented for execution must be accompanied by the original of the instrument at the time of application before 2 p.m. (11 a.m. on Saturday) and found to be in order, may be acted upon on the following day.

* Insert Name of Stock

† Names, residences, and qualities of Stockholders to be written at length and legibly.

‡ Names, residences, and qualities of Attorney, to be written at length and legibly.

§ When the Power is for transferring Stock to a Specified Account it should be stated whether the Account be old or new.

This is an application for a power of attorney as used by the Bank of England, and most other banks have very similar forms. The application having been lodged by hand, the "power of attorney" will generally be ready for delivery the same day (*see* top left-hand corner). The power of attorney, having been duly executed, must be presented at the "Power of Attorney Office" of the Bank before 2 p.m. any day (Saturday excepted), and if found to be in order may be acted on the following day. The power may be acted on (if in order) the same day that it is lodged, if a fee of 5s. is paid, and a written reason given by the selling broker explaining the need of haste. I should mention that the Bank gets the "power" stamped at Somerset House with a 10s. stamp, and charges 1s. 6d. as a fee for its trouble in the matter—thus making a total cost of 11s. 6d. If for English Government Stock and the nominal amount does not exceed £100, the stamp is only 2s. 6d., making a total charge of 4s. The Bank of England is the only bank which charges any fee for making out the power of attorney.*

The method usually adopted when companies or corporations are buying inscribed stocks is to furnish the inscribing bank with a copy of their Certificate of Incorporation, or Special Act of Parliament, and also a certified specimen of their seal with an exact description of the procedure required in order that it may be affixed. (In most cases the seal can only be affixed by order of the Board or in the presence of a certain number of directors). The seal is in effect the official signature, and on each occasion of a sale comparison is made with the copy already deposited. Thus you will see that there is really very little danger of any fraud occurring. In some few cases the specimen of the seal and the regulations for affixing same are not required owing to the fact that they are already well known, as for example in the case of certain banks. Occasionally the procedure is slightly varied, but the above particulars are sufficient to indicate the general custom. The person to whom the power of attorney is given (usually the seller's broker), must in due course attend at the bank and sign in the same way as already explained in the case of a private holder.

* The power must be signed by *all* the stockholders in the account if more than one (*i.e.*, joint account). Particular attention must be paid to the instructions in reference to signing and witnessing printed on the back of the power of attorney.

Now, as to the number of accounts that may be held by one person. The Bank of England will allow one person to hold four accounts in the one name, and those accounts will be marked A, B, C and D. You will readily understand that in some cases this is a great convenience. For example, I might hold Consols in my own name, as my own property, and I might also be acting for three trusts, and I should want to keep the trust funds in separate accounts, which would be duly marked B, C and D. Perhaps I ought to mention that the Bank does not recognize trustees as such; so far as it is concerned the name registered in its books is that of the actual owner, and it takes no note of the fact that he merely holds for the benefit of some other person or persons.

Again, if the stock is held in joint names the same rule applies, only four accounts in all being allowed, and any variation in the order of names will be of no gain in adding to the number of accounts allowed. Four, and only four accounts are allowed in all, and in addition only four names will be allowed in any one account. Other banks follow very much the same custom, but they do not generally have the arrangement A, B, C and D accounts. As a rule only one account is allowed in the same names unless the leading name is varied. Thus, with the full number of names allowed, viz., four, there could be four joint accounts, the first name differing in each case. The variation in order of second and subsequent names is in no case of any importance.

The following notice, which was published in January, 1909, will explain the manner in which the accumulation of dividends at compound interest is arranged for at the Bank of England:—
(See p. 162).

There are a few of the most important inscribed stocks which, in common with Consols, have two quotations marked in the *Stock Exchange Daily Official List*, one for cash, and the other for the account. In all of these there is a monthly instead of a fortnightly account. These stocks are:—

Consols.

2½% Annuities.

Local Loans Stock.

Irish Land Stock.

National War Loan.

India Stocks.

Transvaal 3% Guaranteed Stock.

Metropolitan Water Board B Stock.

London County Council Stocks.

FACILITIES FOR THE INVESTMENT OF DIVIDENDS THROUGH THE BANK OF ENGLAND.

The BANK OF ENGLAND give notice that they are prepared, in accordance with instructions received, to undertake the investment, in the same Stock, of the Dividends upon the undermentioned Stocks:—

£2 : 10s. per Cent. Consolidated Stock (commonly called Consols).

£2 : 10s. per Cent. Annuities.

Local Loans £3 per Cent. Stock.

War Stock £2 : 15s. per Cent.

Guaranteed £2 : 15s. per Cent. Stock.

Transvaal Government £3 per Cent. Guaranteed Stock.

India £3 : 10s. per Cent. Stock.

Do. £3 per Cent. Stock.

Do. £2 : 10s. per Cent. Stock.

Metropolitan £3 : 10s. per Cent. Stock.

Do. £3 per Cent. Stock.

Do. £2 : 10s. per Cent. Stock.

£3 : 10s. per Cent. London County Consolidated Stock,

£3 per Cent.

Do.

Do.

£2 : 10s. per Cent.

Do.

Do.

The instructions apply only to amounts of Stock less than £1,000. Such Stock may stand in one, two, three, or four names. In joint accounts, one at least of the Stockholders must be over 21 years of age.

Proof of the date of birth of any Stockholder under 21 years of age must be lodged with the Bank of England.

The stock must already be standing in the applicant's name. The Bank do not undertake the original investment.

The investment of a dividend will not take place until the first working day of the month following that in which it is due, whereby a Stockholder is given the opportunity of applying to receive the warrant for any particular dividend by post should he so wish.

All unreceived arrear dividends (if any) are dealt with at the time of the first investment under order.

For each pound, or part of a pound, invested, there will be a charge of one penny. Should a Stockholder wish to be informed of each purchase, the Bank of England will furnish particulars for an additional charge of threepence per investment. These charges will be deducted from the dividends before the investments are made. *When any person, who has elected to dispense with advices, subsequently makes enquiry as to the amount of the accumulated stock, he will be furnished with such information upon payment of threepence per investment, with a maximum charge of two shillings and sixpence.*

Orders to invest are cancelled—

(a) By the sum of Stock exceeding £1,000.

(b) By the death of a Stockholder.

(c) By a written request to stop the purchases.

(d) By the coming of age of a minor in the account.

The dividends cannot be invested on an account in which a deceased name appears, and it should be remembered that proof of death does not remove a Stockholder's name from the Bank books.

Under the provisions of Act 55 & 56 Vict., ch. 39 sec. 3,—

(a) Where an infant is the sole survivor in an account;

(b) Where an infant holds Stock jointly with a person under legal disability; and

(c) Where Stock has by mistake been bought in or transferred into the sole name of an infant,

the Bank may, at the request in writing of the parent, guardian, or next friend of the infant, receive the dividends and apply them to the purchase of like Stock, and the Stock so purchased shall be added to the original investment. In these cases the limit of £1,000, mentioned above, does not apply.

Forms can be obtained on application at the Head Office of the Bank of England, or at any of its Branches. All communications on the subject should be addressed to "THE CHIEF ACCOUNTANT, BANK OF ENGLAND, LONDON."

Many people when they are investing wish to pay at once if they have the money lying idle at the bank, and naturally they are enabled to deal at a lower price than if they deferred their payment until settling day, which may be nearly a month afterwards. Thus the difference between the cash price and the account price is greatest at the beginning of the account, and is approximately equal to the value of one month's interest on the purchase price at the current market rate of interest; as the account day draws near the two prices approach one another and eventually become the same.

REGISTERED STOCK.

Registered stock is so called because the names of the holders are registered in a book kept for that purpose. The registration has much the same effect as inscription, but there are several important points of difference between the two classes of stock. In the case of registered stock there is always a stock certificate issued, and it is transferred, not in the way I have described for inscribed stock, but by means of a deed of transfer, of which I showed you an example when explaining the purchase of some Lipton's shares. That deed of transfer is almost invariably subject to an *ad valorem* stamp duty of 10s. per cent. on the consideration money, but there are certain exceptions, which you must be careful to note. For instance, in some cases a composition is arranged for in the same way as for inscribed stock. This is usually so where the issues are made by Colonial Governments and Corporations. If you look on page 2 of the *Stock Exchange Daily Official List* you will see that, under the heading "Registered and Incribed Stocks," it states that "No stamp duty is payable except for "Dominion of Canada Four per cent. Reduced and Dominion of Canada Canadian Pacific Railway $3\frac{1}{2}$ per cent. Land Grant Stock ($\frac{1}{8}$ per cent. on amount of Stock)." That is to say, in the two cases mentioned the stamp duty is $\frac{1}{8}$ per cent., but in all other registered stocks in the list referred to there is no stamp required on the deed of transfer. The certificate of registered stock must be most carefully preserved, as it is necessary to produce it when the stock is transferred.

In the case of both inscribed stock and registered stock interest is payable by means of a *warrant* or *cheque*, which

can be paid either into one's own banking account or cashed at the bank from which it was issued.

A great advantage of inscribed stock is that it can be transferred in any fractional amount. Registered stocks, however, are subject to various rules in this respect, and in practice it is not advisable to purchase odd amounts, as there is generally some difficulty in selling. When a broker offers to sell a jobber less than £100 of registered stock, the latter says "free," by which he means that the *seller* must pay the stamp and registration fee.

Registered stock must be distinguished from registered shares. In the first place shares can only be transferred in integral numbers,* and the fact of each share having a separate number gives to them an individuality which does not exist in the case of stock.

The next class of securities to which I would draw your attention is Bonds. These are of two kinds, Bearer Bonds, which are by far the most usual, and Registered Bonds.

BEARER BONDS.

Bearer bonds are a favourite form of issue with Foreign Governments, American Railway Companies, &c. There is no register of names kept; the issuers do not know who hold them, and they are transferable simply by delivery, that is to say, they are negotiable instruments. The stamp on bearer securities issued in the United Kingdom is affixed at the time of issue by the borrowing Government or Company, and it is at the rate of 2s. 6d. per cent. in respect of bonds bearing a date after 3rd June 1862 and before 6th August 1885, but after the later date the rate is 1s. for every £10, or 10s. per cent.†

Bonds of Colonial Governments, however, are exempt from this increased rate, and are *still* only liable to a duty of 2s. 6d. per cent. (This exception does not apply to Colonial Municipal Bonds). These rates of stamp are on the amount secured, and must be paid on the premium also, if any, at which they are repayable. Thus, for example, if a bond for

* NOTE.—There are a few unimportant exceptions to this rule.

† In the Finance Bill, 1909, this is raised to £1 per cent.

£100 is repayable at 110 per cent., then the stamp must be for 11s. and not 10s. In cases where bonds are repayable at par at a fixed date or at the option of the borrowers at some earlier date at a premium, the stamp is required on the par value only.

Perhaps some of you are wondering why I am going so fully into this matter of stamp duty, but I shall show you in a minute that it is most important when purchasing bonds to see that everything is in order, as otherwise your company may suffer considerable loss. Bearer bonds issued in America do not, of course, bear the English bond stamp, and before a purchase or sale in this country can be legally carried out, this stamp must be duly impressed. As to who shall bear the cost of this is a matter of arrangement, and would be allowed for in the price paid. It is possible, however, to avoid this expense by purchasing direct from America, and having the whole transaction arranged and carried out there; such a transaction may, of course, be arranged through an agent. As long as the investor retains his holding no difficulty will arise, but should he at any time wish to sell in the United Kingdom, the stamp duty must be paid. When once the bonds have been stamped as required in any particular country they are thereafter subject to no further stamp duty in the said country. In considering an offer of such bonds, it is therefore important to ascertain first whether they are stamped, as if not the price should be $\frac{1}{2}$ per cent. less.* If unstamped bonds are held until the date of maturity there is no need to have them stamped as they can then be sent back to America for repayment of principal, or in some cases repayment is obtained through an agent appointed in England for the purpose. It is, however, important to notice that if repayment is obtained in England by means of some party who takes them with the intention of sending them abroad for collection and so making a profit, it would probably be held that such transaction was in the nature of a negotiation, and as such would come within the scope of the Act, and the bonds would therefore require stamping.

The payment of interest on bonds cannot be made in the same way as is done with registered stock, because there is no means of tracing the holders' names and addresses. The interest payments are therefore arranged by means of sheets

* Now £1 per cent. less (*see* Finance Bill, 1909).

of coupons. These coupons are quite small, and as they become due the owner or his banker cuts them off from the sheet and presents them for payment. They are generally numbered and dated, and also have the amount of interest clearly shown.

I must here explain that the sheets of coupons are always arranged so that the first one payable is placed at the bottom right-hand corner, and the last one (*i.e.*, the coupon for interest due immediately before the maturity of the bond) is placed at the top left-hand corner. It sometimes happens that the coupons issued with a bond are not sufficient to last until the date of maturity, and in such a case a "talon" is attached, on presentation of which a new sheet of coupons will be delivered. For example, in the prospectus of the Swedish Government 4 per cent. Loan of 1908, the following notice appears: "A talon will be attached to the Bonds, on presentation of which new coupon sheets will be issued, free of expense, in London." When a large number of bonds are held a considerable amount of work is involved in cutting off and dealing with the coupons. It is usual to tie up all the coupons of one class in a bundle, carefully counting them in order to see that they agree with the total number of bonds held, a precaution which is most necessary as these small pieces of paper are very easily mislaid.

In the case of British bonds no complications arise as the coupon is for all practical purposes a cheque payable on or after a certain date, and one's banking account is simply credited with the face value of such coupon (less income tax).

In the case of foreign bonds, however, when they are not payable in sterling in London, there is the rate of exchange to be negotiated. Your banker will probably sell the coupons to a dealer, and get the best terms he can: these terms, of course, depend on the particular rate of exchange ruling. An even better way, however, is for the holder to sell the coupons himself (if there is a large quantity), as he will then be able to check the amount offered by different dealers and accept the most favourable.*

It must be noticed that here a low rate of exchange is the most favourable to the holder, who, in the case of American

* Coupons sold to dealers are always bought "sans recours," *i.e.*, returnable to seller if default is made when presented or if it is found that there has been any irregularity as, for instance, theft.

bonds, for example, gets more pounds sterling for his dollars than if the rate were high ; and this is exactly the reverse of the position when he is buying some security, and consequently paying out—here a high rate is the most beneficial.

These dealers are often able to give very favourable terms for coupons, as the nature of their business is such that they are constantly in need of credit in some other country. They merely send the bundles of coupons abroad to their bankers who collect the amounts due in the ordinary course of business, and credit their clients' accounts. Some large insurance companies find it convenient to open accounts of their own abroad and to send their coupons there for collection.

In the case of some bonds there is an option to cash coupons at a fixed rate of exchange, either in, say, France at so many francs to the dollar ; in Germany at so many marks to the dollar ; or in England at so many shillings to the dollar, and so on. It will thus be advisable to study carefully the rates of exchange then ruling on the various financial centres, as it may well happen that, instead of accepting cash at a fixed rate of exchange in England, it would pay better to encash the coupons in France or Germany, negotiate the exchange, and so obtain a larger equivalent in sterling than would otherwise have been the case.

One great advantage of bearer bonds is that they are so easily negotiable ; if you want to sell them you can do so at any time by mere delivery, and a great deal of difficulty in selling in various markets is thereby avoided. When they are issued abroad they can be sent over and sold in England, whereas if the security were a registered stock there would be a considerable amount of trouble involved. There are, however, certain disadvantages attaching to bearer bonds—for example, the danger of losing them. You have to look carefully after them, and have them deposited either with your bank or in some strong-room or safe ; and the same remark applies to the coupons, which are negotiable instruments, and if stolen they could generally be quite easily cashed ; even if they were never presented for payment the legal owner would certainly be placed in a very unenviable position. If it is intended to hold bonds for a long period, it is advisable to detach all the coupons and keep them in a separate safe or strong-room as an additional precaution

against theft, bonds being unmarketable unless the coupons are attached thereto.

The coupons should be looked through to see that none are in a damaged condition through rubbing or folding, and the date of the first one checked with the next interest instalment date. The signature on the bonds should be carefully examined, and the numbers checked with those given in the *Official List*. The trouble of cutting off the coupons is by many people considered a disadvantage. It is thought to be such very important work in some companies that it is entrusted only to the very highest officials, and consequently considerable expense is involved. Personally I cannot see that this need be considered of any importance, as there is no reason why junior clerks should not do the necessary work. In America, where bearer bonds are by far the most usual form of investment, large insurance companies, holding enormous numbers of them, find it convenient to have a special staff, whose main duty it is to cut off and deal with all coupons.

When purchasing bonds it is essential to examine them most carefully in order to avoid any possibility of mistake or fraud. In many cases they are printed in some foreign language, and then it is advisable to get a proper translation and see whether it agrees with the particulars submitted previously.

Another point of considerable importance, is the checking of the numbers on bonds which are quoted in London with those shown in the *Official List*. Unquoted bonds are bad delivery, unless purchased as such. It is impossible to state precisely the exact kind of mistakes to be specially guarded against, and the most I can do is to give a few examples of those which I have come across in my own experience :—(a) An issue of bonds by a Colonial Railway Company was guaranteed as to capital and interest by the Government of the Colony. Upon examination of the conditions printed on the bond, it was found that the guarantee referred to expired a few days before the date of maturity of the bond. The bonds were, of course, returned, and the error, which had resulted from a misunderstanding, was at once rectified. (b) A large purchase was made of 4 per cent. sterling bonds, with interest payable half-yearly. The sheets of coupons were carefully examined, and on one

of them it was found that the amount payable, although correct on the majority of coupons, was for the first few years only £1. 10s. 5d., instead of £2. The solution of this extraordinary mistake was never obtained. The sheet was returned with the bond to which it referred, and in due course another was received in its place. (c) An examination of the numbers of a large block of bonds revealed the fact that apparently a greater amount had been issued than was authorized. By an endorsement on the back of each bond it was explained that the total series was numbered from 1 to 10,000 inclusive, whereas some of those delivered bore numbers higher than 10,000.

One sometimes feels a little doubt when a big investment of, for example, £100,000 in bonds has been made, and sees the large bundle of sheets of paper which in due course are delivered, as to whether they are really what they purport to be. Such a thing as forgery is hardly probable, but it is not unknown, and therefore the most minute scrutiny should always be insisted upon. I do not say that the risk is great, but I certainly think it highly advisable that you should know the people with whom you have business relations, and deal only with the very best and most responsible firms.

REGISTERED BONDS.

There is only one more matter I wish to deal with this evening, and that is Registered Bonds. As I have already explained, bonds are generally to bearer, and can be transferred by delivery; but in some cases bonds may be actually registered. There are several different ways of registering. I will first refer to the Nizam's State Railway Bonds, on page 5 of the *Stock Exchange Daily Official List*. If you look them up in the *Stock Exchange Official Intelligence** you will see an explanation of what the bonds are: "4 per cent. Mortgage Debentures—Bearer or Registered"; and a little later on it is stated that: "Bearer Debentures may be converted into Registered Debentures free of charge, but when registered cannot be re-converted. Prices marked in *Official List*." You will find that the bearer bonds are rather dearer than the registered bonds, the reason being

* In many places I refer to the *Stock Exchange Official Intelligence* merely as *Burdett*, for, although that name no longer appears in the title, it is still constantly used.

that in securities of this kind those to bearer are mostly preferred, and therefore it is not generally advisable to register unless it is intended to hold them permanently.

There are *some* registered bonds where re-conversion into bearer bonds is allowed. If you look at page 624 in *Burdett* for 1908, you will see: "Bell Piano and Organ Company 5 per cent. First Mortgage Debentures, Bearer Bonds can be registered and re-converted at a fee of 2s. 6d." In that case you may have bearer bonds and decide to register them. If you take them to the Company's offices and pay the requisite fee of 2s. 6d., they will be duly registered in your name in their books. They take the coupons as well, and in future you receive your interest simply by warrant. You do not have the responsibility of locking up your bonds, or the trouble of cutting off the coupons. Supposing that after registration you wish to sell; you go to the offices of the Company and un-register the bonds for a fee of 2s. 6d., and then sell them as bearer securities. The purchaser can, if he wishes, re-register afterwards. In this way the transaction is carried through without any *ad valorem* stamp duty being paid, and no transfer deed is required.

Some bearer bonds can be converted into inscribed stock, but when you so convert you have to pay the composition stamp duty applicable to inscribed stock at the rate of 1s. 3d. for £10; that is to say, if you have a bearer bond for £100, and wish to convert it into inscribed stock, you have to pay 12s. 6d. for having it so inscribed, and it can then be transferred free of stamp, and possibly might command a better price. If a holder wished to re-convert it into a bearer security he would have to pay the 10s. per cent. stamp duty.* As an example of this I will refer you to page 104 of *Burdett* for 1908: "Imperial Japanese Government 5 per cent. Bonds," issued in 1901-2. Another example of a similar nature is the 3½ per cent. Consolidated Stock of the London County Council recently issued. Applicants could have it either in the form of inscribed stock or bearer security, and the latter could at any time be converted into the former free of cost if the holder chose, no stamp duty being payable as this had already been arranged for by means of a composition fee. This case is somewhat peculiar, as although nominally bearer bonds with sheets of coupons for payment

* See Finance Bill, 1909.

of interest, they were not strictly so, being inscribed in the books at the Bank in the name of the Chief Cashier.

In certain cases it is possible for the holder of a large number of bearer bonds to deposit them with the authorities and receive in exchange one certificate for the whole amount. The following extract of the regulations respecting the deposit of Swedish State Loan Bonds will serve to illustrate how this is carried out:—"Bonds payable to bearer, forming part of a Swedish State Loan can be deposited with the National Debt Office and registered in the National Debt Book as the property of a certain person, in evidence whereof a nominative certificate will be issued by the National Debt Office. Such certificates are of two kinds, viz.:

"*a.* Nominative Certificates, Class A (Full Deposit), which are issued when both the bonds themselves and the coupons not yet due, together with the talons, are deposited. The interest on the bonds deposited in exchange for these certificates will be paid only to the owner whose name is written thereon or to his proxy, and then only through a certain stated bank or banker.

"*b.* Nominative Certificates, Class B (Partial Deposit), which are issued when only the bonds themselves are deposited, the owner retaining the coupon-sheets with the talons. The interest on these certificates will be paid at any of the places of payment for the loan in question, to the person delivering the corresponding coupons for which payment is due."

Such a course of procedure is of great advantage to big investors like insurance companies and banks.

In countries where stamp duty is not chargeable, registration can be carried out with much greater ease than it can be in England.

NINTH LECTURE.

Stock Exchange Securities.

(Continued.)

WHEN speaking of registered and inscribed stock, there is one thing which I omitted to mention, namely, that there is generally a period during which the register is closed in order that the interest amounts may be made up. Particulars as to the dates of closing can be readily found in *Burdett's Stock Exchange Official Intelligence* or the *Stock Exchange Year Book*. During the time that the books are closed it is always advisable, in case of any purchase or sale of stock, to be quite certain as to whether the price quoted is cum dividend (*i.e.*, including interest) or ex dividend (*i.e.*, without interest). It is most convenient for the sale to be made ex dividend, because the vendor's name is still on the register, and consequently the dividend will in due course become payable to him, although at that time he may not be the holder of the stock. If, however, as sometimes happens the stock is sold cum dividend, the vendor must, when he receives the dividend, return it to the broker, who will hand it over to the purchaser. The purchaser of stock cum dividend during the period when the register is closed must be careful to see that he obtains his dividend, and, if necessary, must communicate with his broker, whose duty it will be to obtain it for him; this is generally termed, "getting it from the market," or "claiming of seller."

In my last lecture I was speaking of bonds, and I was unable to complete the information which I think it necessary to give you. Bonds are repayable as to capital in many ways. They may be repaid either at par or at a premium; they may be repaid at a fixed date or dates, or there may be

optional dates of repayment. The method by which the repayment is provided for is of considerable importance in calculating the interest yield.

A very usual method of repayment is to apply a fixed amount to the service of the loan, which is to continue so long as any of it is outstanding. Thus, in the case of a $4\frac{1}{2}$ per cent. loan, with a 6 per cent. service, there will be a surplus of $1\frac{1}{2}$ per cent. in the first year available for repayment of capital, but the next year there will be a larger amount available for such repayment because there is a smaller amount outstanding upon which interest has to be paid; and so each year the amount of capital repaid will increase until, in the last year, nearly the whole of the 6 per cent. will be available for that purpose. A sinking fund of this kind is known as a "Cumulative Sinking Fund." If the bonds are repayable each year by drawings at par, it is easy to see that the sinking fund is cumulative at $4\frac{1}{2}$ per cent. compound interest, and the total period can be readily calculated. As some bonds will be repaid each year, the average period is, of course, much less than the total period; and where a number of such bonds are purchased, either at a premium or a discount, a somewhat interesting little calculation is involved in order to ascertain the exact yield on the investment. In many cases, however, it will be found that although there is a fixed service, such as that just referred to, yet the borrowers have the right either to repay the bonds by drawings at par, or to buy in the open market if the price is below par. The effect of such a provision may be to reduce considerably the average term of the loan, but this must necessarily depend upon the conditions of the market. In some cases it is provided that the sinking fund shall not be commenced until after a certain number of years, whilst in others the sinking fund may be increased after a certain date. Then, again, the bonds may all be repayable at par at a fixed date, or at the option of the lenders at any time between two fixed dates. Occasionally it is provided that the bonds may be repaid at a premium after so many years, or at par at the expiration of the agreed term. Instead of repayment being met by means of a fixed service, loans are often repayable by equal instalments each year or at agreed intervals. (You will notice that this has the same effect as a decreasing service, because each year a less sum is

required for interest.) Sometimes it is arranged that an issue of bonds is to be repaid by means of drawings of varying amounts at stated intervals in accordance with a plan or table of amortisation (which is generally printed on the back of the bonds). There are various other methods applied to repaying bonds, but I think I have said enough to impress upon you the great importance of always looking very carefully at the conditions as to repayment, not only in order to be able to state what the average yield on the bonds will be, but also in order to be able to calculate the correct sinking funds for the purpose of your own book-keeping. If bonds are purchased at a premium the sinking fund should be calculated on the assumption that repayment will be made at the earliest possible date. For example, suppose 5 per cent. bonds, repayable in July, 1960, with an option to repay at any time after July, 1940, are purchased at a premium, then the sinking fund should be calculated on the assumption that the bonds will certainly be repaid at the earlier date. On the other hand, if the same bonds were purchased at a discount, the sinking fund should be calculated to correspond with the later date. You will notice that in the latter case the sinking fund would be negative—that is to say, the ledger value would be written up instead of down each year. Negative sinking funds are not invariably adopted, but you will easily see that if they are neglected, the apparent yield prior to the year of redemption is too low, and then suddenly a profit must be accounted for.

In cases where bonds are repaid by means of drawings, it is important to ascertain at the earliest possible moment the numbers of the drawn bonds. Lists of such drawings are published and advertised in certain of the more important daily and financial papers, giving the numbers of such bonds as each drawing takes place.* These lists must be carefully watched, so that any bond which you hold may be handed in to the agents for repayment. It does not invariably happen that these lists of drawings are so advertised, and it is sometimes necessary to make enquiries of the agents. Interest ceases from the date on which payment is due, and it is, therefore, important not to miss your number in the list when it appears, as if you do not obtain repayment your capital is standing idle until the next coupon date comes

* A useful publication in this connection is the Bondholders' Register.

round, when intimation is automatically given by non-payment of interest. Sometimes, however—notably with certain of the Russian Government issues—the payment of the interest on the subsequent coupons is continued, although the bond has been officially drawn; and when, after inquiry, the facts of the case are made known to the holder, all this subsequent interest is deducted by the authorities from the capital repayable. It will thus be seen that in such a case, if the ignorance of such drawing continued long enough, a time might eventually come when a holder of a drawn bond, instead of being entitled to repayment, would actually be in the position of owing the Government something.*

There are various conditions attaching to certain bond issues which it is advisable to look very carefully into at the time of making a purchase. For instance, there is often a limit to the time during which the coupons may be presented for payment—*e.g.*, from three to seven years—after which time the borrowers will not hold themselves liable for payment. Then in some cases coupons will not be accepted if the corners are torn off or some other mutilation has taken place. Again, there are a certain number of days required, during which the coupons have to be deposited for examination, before payment will be made. All these points are of considerable importance, and if it is ever your duty to deal with that part of the office work you should pay very careful attention to them.

It will be advisable to take this opportunity of explaining what is meant by "Lloyd's Bonds." These securities are generally issued by railway companies and corporations whose borrowing powers are limited by Act of Parliament. They are called Lloyd's bonds because they were first invented by Mr. J. H. Lloyd, a well-known counsel, who suggested the following form which has ever since been generally followed:

The _____ Railway Company hereby
acknowledge themselves to owe to A.B., of _____
Contractor for Public Works, the sum of _____ for
works executed and material supplied by the said A.B. to
the said Company for the purposes of their undertaking;

* It is only right to point out that the Russian Government not only publishes lists of bonds as they become drawn for repayment, but also lists of bonds which have been drawn previously but not cashed.

and the said Company, in consideration of the premises and of the agreement of the said A.B. to forbear and give time of payment of the said sum of _____ until the day and year hereinafter mentioned, hereby undertake to pay to the said A.B., his executors or administrators, the said sum of _____, on the day of _____ 19____ with interest in the meantime at the rate of _____ per cent. per annum, by equal half yearly payments.

Given under the Common Seal of the Company this _____ day of _____

(L. S.)

N.B.—The above form would be subject to variation according to circumstances not affecting the substance and general tenor.

The first point to notice is that the bond is a security in respect of a debt already incurred, whereas a debenture issued by a railway company under its statutory power is in respect of money borrowed or to be borrowed. In 1864 a Select Committee of the House of Lords on Railway Companies' Borrowing Powers considered the question of the rights of holders of Lloyd's bonds as compared with debenture holders, and the following is the opinion submitted by the late Lord Cairns and the late Mr. J. H. Lloyd:

"The holders of these bonds can sue upon them in the name of the original obligees, and if they have been *bonâ fide* given as a security for the payment of moneys owing for work done or supplies furnished to the undertaking there would be no ground of defence to the action, either legal or equitable, and judgments could be recovered upon them which might be enforced either by execution against the effects of the company, or failing such effects, against the shareholders, to the extent of the amount unpaid on their shares, or might be registered and become a charge upon the lands of the company. In any conflict between the holders of these bonds and holders of statutory debentures it would, we apprehend, be practically a question of more or less diligence. The debenture holders would have a direct and prior charge by virtue of their debentures upon the whole undertaking, but their available remedies would be

“no better than those of other creditors except in the power to get a receiver appointed.

“There is no ground whatever for supposing that the directors incur any personal liability by issuing these bonds. The only question that could arise would be this: it would be competent for any one or more of the shareholders to apply for an injunction to restrain the directors from entering into a contract for the execution of works on the terms of payment by Lloyd’s bonds, on an allegation that it would be an improper and unauthorized mode of carrying out the undertaking, and likely to be onerous to the shareholders in respect of the price to be paid for the works, &c.

“But, practically, we presume there is no reason to apprehend any objection from shareholders, and if no such application be made by them the only risk is removed, because the bonds, when given, would be unimpeachable.”

Apparently the opinion is still good in respect of all corporations except railway companies, and the latter are now governed by Clause 23 of the Railways Companies Act, 1867, which leaves no doubt as to the prior right of debenture stockholders. The following is the wording of the clause referred to:—

“All money borrowed or to be borrowed by a company on mortgage or bond or debenture stock under the provisions of any Act authorizing the borrowing thereof shall have priority against the Company and the property from time to time of the company over all other claims on account of any debts incurred or engagements entered into by them after the passing of this Act.”

It would be beyond the scope of these lectures to give any opinion as to the advisability of an investment in Lloyd’s bonds, and I need only say that in any case it would be necessary to enquire very carefully as to the validity of the issue.

A question often asked is, “What is the difference between sterling, gold, and currency bonds?” When we speak of sterling bonds we mean that both the capital and interest are payable in sterling, thus, for instance, a fifty year 4 per cent. sterling bond for £100 will entitle the holder to receive £4 interest in English currency each year for fifty years and at the end of that time £100 capital in English money. Of course it would be correct to refer to any bonds issued here by

an English company as sterling bonds; for instance, we could say that Messrs. J. I. Thornycroft's 5 per cent. First Mortgage Debentures were sterling bonds, since they are payable in English currency, but it is usual to apply the term only to bonds of Foreign and Colonial Governments, Companies, &c., issued in England. I believe sterling bonds were originally introduced with the object of tempting the English investor, and for many years now they have been quite common. As an example I may mention the 4 per cent. Sterling Mortgage Bonds of the Pennsylvania Railway Company issued in London in April, 1908. The coupons of sterling bonds present no difficulty whatever as they can be paid into one's banking account for collection in exactly the same way as dividend warrants or cheques.

A gold bond is one in which the interest and capital are payable in gold. A gold bond issued in England is of necessity a sterling bond, but a gold bond issued in America or some other foreign country is not so. In the latter case the holder is entitled to payment in gold, but there is still the question of the state of the exchanges to be considered. For instance, if you hold \$50,000 of 4 per cent. American Railway Gold Bonds, with interest payable half-yearly, you are entitled to receive \$1,000 in gold on every interest date, but if resident in England you will require to have this money remitted. To have gold dollars sent over will in most cases cost more than payment by means of a bill of exchange, the cost of which will depend upon the rate of exchange ruling.

Although gold bonds may be repayable at par, it must be remembered that the state of the exchange ruling at the time of such repayment may have a very considerable effect. For instance, when the exchanges are unfavourable, that is to say, in the case of an American bond, when the rate of exchange is high more dollars will be required to make £100, and therefore, if you hold bonds for a certain number of dollars maturing at such a period it follows that you will get less for them. A high exchange rate is unfavourable for the repayment of bonds, and you will find if you make the calculation that the difference between the par rate of exchange and the highest point it may reach represents about $\frac{3}{4}$ per cent. Thus, even with a gold bond the exchanges might be so high that you would be subject to a loss of about $\frac{3}{4}$ per cent. in the repayment of your bond. I do not say that this

is of any great importance, because, on the other hand, the exchanges might be favourable for the cashing of coupons, and, again, your company might find it convenient to have a banking account over in New York, whereby it could avoid a considerable amount of that loss. I am simply pointing out that there is that possible difference to be taken into account.

If you turn to page 6 in the *Stock Exchange Daily Official List* you will see that there are a large number of American Railway Gold Bonds quoted in dollars, and the price there stated is for 500 dollars. Now, if a dollar were worth exactly four shillings, then a bond for 500 dollars would be exactly the same as one for £100, but as you know, a dollar is worth more than four shillings. The ten dollar gold coin of the United States is made out of 458 grains of gold, nine-tenths fine, so that $\text{£}1 = 4.86\frac{2}{3}$ dollars, that is to say, one dollar is worth approximately $49\frac{5}{16}$ pence. This is called the mint par of exchange, and, as you will see, is the value calculated according to the actual amount of pure gold in an English sovereign and a United States ten dollar gold piece respectively. If a bond is quoted at 93 in the English market, it means that a purchaser will pay £93 for each \$500 nominal, which, if we consider the dollar as worth $49\frac{5}{16}$ pence, is equivalent to £102. 14s. $8\frac{1}{4}d.$, so that the price is equal to about $90\frac{1}{2}$ per cent.

Currency bonds are those in which the interest and capital are payable in the currency of some foreign country. Here, again, I may mention that any bond issued in England is currency, gold, and sterling, because this country is on a free gold-coinage basis, but in those countries where the monetary system is not based on a gold standard, a currency bond may be worth much less than a gold bond for a similar amount. Take, for example, the bonds issued by various South American Governments, payable in their own currencies, which in many cases are enormously depreciated and constantly fluctuating. If the interest and capital can be paid in paper currency, there is, of course, no limit to the possible loss, as the paper may become practically worthless; this is the case in Colombia at the present time. If, however, the bonds provide that payment shall be made in silver currency, as is the case in the Chinese Government Loan of 1894, the fluctuations in value will depend mainly upon the price of silver.

Still another class of bond to which I must call your most careful attention is that in which there is a fixed rate of exchange. On page 3 of the *Daily List* you will see the "Cuba 5 per cent. Gold Bonds of 1904." These bonds, although quoted in United States gold dollars, are payable both as regards interest and capital in London, at the fixed rate of exchange of \$4.86 per £1. In all cases where there is a fixed rate of exchange the price is quoted as a percentage, instead of per \$500, as explained previously. You will, however, find that in these bonds the holder has the option of receiving payment in gold dollars in New York, or in marks in Frankfort and Berlin, at the fixed exchange of 4.20 marks per \$1, or, again, in Paris at the fixed exchange of 5.18 francs per \$1. You will thus see that it is always advisable on the approach of any interest date to examine the rates of exchange ruling, before deciding upon the form of payment. In some cases, however, although a loan may be issued with a condition that payment of capital and interest shall be made at fixed rates of exchange, yet there may be no option that can be exercised by the holder. For example, in the recently issued Argentine Government Loan the prospectus gave the following particulars:—(see p. 181).

In this case £2,960,000 of the total issue was allocated to London, and these bonds are therefore for all practical purposes sterling bonds. The other portions of the loan issued in France, Germany, and the United States are gold bonds payable in those countries.

Some time ago there was a very great dislike to any currency bonds of the United States, and I think even at the present time you will find people who would much rather have gold bonds. Personally I think the difference between the two is so slight that it is hardly worth considering. Although those bonds might nominally be paid in the paper currency of the United States, it is impossible to imagine that the position of affairs in America would ever be such that the country would allow its paper currency to go to a discount. Even in the big financial crisis in the autumn of 1907, although there was a large premium which was referred to as a gold premium, it was not really a premium on gold, so as to cause a discount in the paper currency; it was a premium on cash and referred equally to any form of money. No one minded whether he received

Argentine Government 5 per cent. Internal Gold Loan 1909.

ISSUE OF

Gold Pesos 50,000,000=£10,000,000 Sterling=Fcs. 252,000,000=

Rm. 204,500,000=\$48,650,000 (U.S.A.)

In Bonds to Bearer of Gold Pesos 100 (£20), Gold Pesos 500 (£100),
Gold Pesos 1,000 (£200), and Gold Pesos 5,000 (£1,000).

Authorised by Laws No. 5559 dated 11 September 1908, No. 5681 dated 12 October 1908,
and No. 6011 dated 19 October 1908.

Principal and Interest payable in Buenos Aires in Gold Pesos, in London in Pounds Sterling at the fixed exchange of 4 Shillings per Peso, in Paris in Francs at Fcs. 5.04 per Peso, and in Berlin in Reichsmarks at Rm. 4.09 per Peso, and in New York in Dollars at \$0.973 per Peso, free from all present and future Argentine Taxes.

Issue in LONDON OF GOLD PESOS 14,800,000 = £2,960,000 Sterling

being part of the above.

dollar notes or gold, because both forms of money were always acceptable at their full value. If this had not been so, the paper would have rapidly gone to a discount in comparison with gold coin, but there was never any suggestion of this happening. My own opinion is that the United States paper will never be allowed to go to a discount, and this view is also held by a large number of people who certainly have a wide experience in the matter.

PREMIUM BONDS.

Premium Bonds, or Government Lottery Bonds, are a favourite form of borrowing by some foreign governments and municipalities.

These are bonds in which the rate of interest allowed is generally very small (say 2 to 3 per cent., sometimes none at all) and quite out of proportion to the security offered. This deficiency is made good, *or is supposed to be made good*, by the chance of the bond being drawn by lot. These drawings take place at regular periods, and the bonds drawn receive, in addition to the capital, a more or less substantial prize.

They are very prevalent on the Continent, and are issued mainly to tempt the small investor, to whom in any case the interest on an investment cannot amount to very much, and may only amount to a few francs per annum. On the other hand, by investing in this class of security he stands a chance of winning a big prize, and this is the bait held out to him.

Of course, the average individual has no idea of the real value of this chance, and it is nothing like as great as he imagines. A calculation made on the whole group of about 130 different issues of bonds quoted on the Paris Bourse recently revealed the fact that the average rate of interest realized, after including the chance of winning a prize, was *less than 2½ per cent.* This is sufficient condemnation in itself.

In order that you may be able to understand the various expressions that are constantly used in the financial papers, it is necessary to know something of the general methods of speculation. It must be distinctly understood that nothing that appears here is intended as in any way approving of speculation in any form whatever; my sole reason for intro-

ducing the subject is in order to give an intelligent explanation of various Stock Exchange transactions, with which sooner or later you will have to deal.

In the majority of stocks and shares, as I have previously said, there is a settlement twice a month. Except where special bargains are arranged for cash payment, purchases are made on the understanding that no payment is due until the account day, and if in the meantime a sufficient rise in the price has occurred, a sale may be made for settlement on the same account day, which will result in a net profit to the operator, without the necessity for him to provide any money whatever. There can be no doubt that this arrangement alone is responsible for an immense amount of speculation, but, as I shall explain, further facilities for gambling are afforded by means of deferring the settlement of accounts to some later date.

The most usual terms met with in connection with Stock Exchange speculation are "bull" and "bear." The former is a speculator for the rise. He buys stocks or shares, not with any idea of retaining them as an investment, but merely in the hope that the price will improve and so afford him an opportunity of making a profit. As explained above, a rise may occur so soon after purchase that the speculator will be able to take his profit during the same account; I may here mention that in the case of a purchase and sale of the same stock or shares during the same account, it is usual for the broker to charge only one commission. In most cases of bull speculations, however, it becomes necessary to hold the stock for a longer period than one account, and for that purpose it is necessary to "carry over." You pay a "contango" (otherwise called a "rate") for the privilege of deferring your payment. Theoretically what takes place is, that the first bargain is closed, and another purchase is made for the next account at a new price, called the "making up" price. The making up prices are fixed by the jobbers of the Stock Exchange in the various markets in conjunction with Stock Exchange Officials, and are based on the middle market price ruling at a certain fixed time. Take for example a purchase of stock made at 93, which at the end of a fortnight it is determined to carry over instead of pay for. If at that time the price was quoted 94 to 94½, probably the making up price would be 94¼, and therefore there

would be a difference of $1\frac{1}{4}$ per cent. (less expenses) payable to the speculator. On the other hand, if the price had fallen, there would have been a difference to be paid instead of received.

A bear is one who operates in the opposite direction to a bull; he hopes for a fall in the price and therefore sells what he does not possess, trusting that before the time comes for delivery he will be able to buy back at a lower price, and thus secure a profit. In the same way as a bull, he may be so fortunate as to achieve his expectation in one account, but more often he *too* will find it necessary to defer settlement. The speculators amongst the general public are much more often bulls than bears. It is only on very rare occasions that the market is oversold, and, when this occurs there is said to be a "back," that is to say, any speculator for the fall who wishes to carry over must pay for the accommodation; he has sold stock or shares which he cannot deliver and he is obliged to borrow the same. In the ordinary state of the market, however, the bear operator receives a certain amount for allowing the payment of the purchase price of the stock or shares sold to stand over. It may possibly help to explain the theory of these transactions if you consider that the bull pays interest in the form of contango rates for the borrowed money with which his stock or shares are paid for, and is entitled to receive any dividends accruing thereon. The bear, on the other hand, has sold stock and must therefore receive none of the accruing dividend, although he is entitled to the interest on the purchase price. Of course, the bear speculator is required to pay the difference in accordance with the making up price at each fresh account in the same way as the bull speculator.

Now let me explain what would happen if I purchased £1,000 nominal of Great Eastern Railway Ordinary Stock, in the belief that an early rise in price will enable me to secure a profit. Settlement day finds me still waiting for the rise, and unable to pay. I therefore ask my broker to arrange to carry over the stock. He will accordingly go to the jobber from whom he bought the stock, and say: "I wish to *give on* that stock; what is the rate?" He means that he wishes to give a certain rate for the privilege of not taking up the stock. The jobber says: "4 to 5." In such a case I shall have to pay at the rate of 5 per cent. per annum for the privilege of

deferring my payment. Now, suppose that shortly afterwards another broker comes to the same jobber, and says: "I wish to *take in* £1,000 Great Eastern Ordinary; what is the rate?" The jobber quotes him the same rate—namely, "4 to 5," and the broker will secure for his client a rate of 4 per cent. on the money which is thus lent for a fortnight. The difference between these two rates will be kept by the jobber as a profit, secured by him in his capacity of middleman.

You will notice that the greater part of the *contango* rate paid by the bull speculator is here paid to some third party who actually lends the money with which the true seller of the stock is paid. It may happen that the seller himself will do the financing, that is to say, he will be willing to keep his own stock for a fortnight and allow payment of the purchase price to be deferred in consideration of an agreed rate, which in the above example is 4 per cent. Instead of a real seller, however, it may be only a bear speculator, who agrees to allow the payment of the purchase price to be deferred, and the jobber who acts as middleman will treat either the real seller or the bear in exactly the same manner, except in the case already referred to where there is a *backwardation*.

The amount of the *contango* differs in accordance with the state of the market, and the condition of the money market. When there is a large bull account open, that is to say, when there are many purchasers desirous of carrying over the stock they have bought, or when money is dear, the rate is said to be heavy; but when the conditions are otherwise, *i.e.*, a small account open, or cheap money, the rate is light.

It sometimes happens that there is a large bear account open, in which case a bull who is desirous of carrying over may actually *receive* a rate instead of paying it. The rate is then called a *backwardation*. Again, there are some occasions when a bull neither pays a *contango* nor receives a *backwardation*, and then his stock is said to be carried over "*even*."

In addition to the *contango*, the broker usually charges commission, generally one-half of what he would charge on an actual purchase, but there is no regular scale, and some brokers do not charge commission at all on carry-over trans-

actions, preferring to charge a full commission when the stock is sold. When a charge is made for carrying over, no commission is charged on the sale. There is one other charge that appears on carrying-over contracts, and that is the contract stamp—2s. for each stock to the amount of £100 or over.

I want you to notice particularly the effect of these two kinds of transactions on the general market. Supposing there are a large number of bulls—speculators for the rise—in some particular stock; this will generally result from a number of very favourable rumours, which may or may not be true. The result is that a large number of people think that there is a good chance of a rise, and accordingly buy. They do not buy with the intention of holding, but in the hope of selling at an increased price. The market is consequently overbought by the bull contingent, and this must cause a certain amount of weakness, because eventually those bulls will be forced to sell. A large bull account must always have a depressing influence on the market sooner or later, and the shrewd financier pays careful attention to this fact. On the other hand, if there is a big bear account, there are a large number of people who have sold, not with the intention of delivering the stock, but with the object of buying it back at a lower price, and this must be an element of strength. There can be no doubt that these two forms of speculation have a useful effect, as in certain events they result in preventing violent fluctuations of prices and in making a freer market for the genuine buyer and seller.

For the most part it is the big financial houses that act as the bears and the public who act as the bulls. In order to give you some idea of the manner in which such institutions are able to carry out their schemes, I will mention one case of which I heard the particulars. There was a very big financial house which held large blocks of certain well-known South African shares; in fact, I believe it held nearly all there were in existence. All sorts of very favourable rumours in reference to the property were circulated, and, as the general tenor of the mining market was favourable, such a large number of persons bought shares that there was quite a boom in them; that is to say, large numbers of people amongst the general public were buying the shares for speculative purposes and simply carrying over, and in this

manner an enormous bull account was created. The financial house already referred to sold their shares through their brokers and at the end of each account, was always willing to carry over at fairly reasonable rates; for what really happened was that the financial house which sold the shares retained them in its own name, and received the contango rates every fortnight as compensation for the deferment of payment. You will readily understand that as there was no expense of transferring the shares, this business of carrying over resulted in very large profits. Steadily the price rose, and still the excited buying by the public continued, until at last the price began to fall; and then for several accounts big differences had to be paid, which were duly received by the house in question. At last, when it was judged that the time was ripe for a final stroke of genius, all carrying-over facilities were refused; and at once there was a disastrous fall in the price, of which they cleverly took advantage to buy back their original holding, of which, you must remember, they had all the time remained the registered holders, although they had in the meantime received huge sums of differences and contango fees.

It is not always possible to get carrying-over facilities at reasonable rates, or indeed at any rates. If the stock has to be transferred and registered in the name of the persons who lend the necessary money, there is, of course, some expense; and it will only be in cases where the stock is carried over for several accounts that there will be any profits at the usual rates charged. In some cases, therefore, a contango can only be arranged provided that the transfer fee and stamp are paid to the lender; and the transaction is thus much the same as obtaining an advance from one's banker, except that the amount lent by the bank is generally a much smaller proportion.

You will probably have noticed in reading the papers that the account lasts for four days. The first is devoted to the mining contangoes, the second is occupied with the general contangoes, and is also mining ticket day, the third is the ticket or name day in other securities, and the fourth is pay day. The last two I have already explained. The first two I have not mentioned before, but I think you will now readily understand their nature; they are for the speculative account, that is, for carrying over.

Perhaps I ought to mention that the settlement of the account is greatly helped by means of the Clearing House system. The brokers prepare what are known as "clearing sheets" on contango day, for certain securities*, which shows the balance struck between his purchases and sales, this being all he need worry about, and the Clearing House does the rest on much the same system as the Banker's Clearing House performs *its* duties.

You will often see a reference in financial papers to "stale bulls." These are people who have been speculating for the rise and have been disappointed for so long a time that they have begun to realize the truth of the proverb, "Hope deferred maketh the heart sick." It is, of course, argued that at any time these stale bulls may start selling, or, as it is generally expressed, "cutting their loss." The existence of a stale bull account in any particular stock is a fairly safe indication of an impending fall in price, unless some favourable news is received in the meantime in reference to the prospects of the company concerned. In the same way there may occasionally be a stale bear account.

A "bear squeeze" is an expression applied to the operation of taking advantage of a known big bear account to create a large demand for the stock. As a result, the price may rise to such an extent that the bears dare not run any further risk, and they rush in to buy before their losses become still greater. There is constantly a struggle going on between the two great contending parties, viz., the bears and the bulls, and in many cases it is merely a matter of who can wait the longer in order to win. In any struggle of this kind the bears try to depress the price by spreading unfavourable rumours, and freely selling in order to impress their opponents with the belief that they know they must win in the end, and therefore are merely anxious to secure the biggest possible share of profit. On the other hand, the bulls spread favourable rumours and buy with as much noise as possible, hoping that at last the bears will be unable to stand out any longer and will buy back at increased prices.

Of all the various tactics employed by Stock Exchange gamblers, none are perhaps ever so entirely successful as

* This clearing arrangement only refers to securities where there is a large speculative account to settle; most stocks and shares are non-clearing.

well-managed "corners." It is only in a properly manœuvred corner that one can have one's adversaries absolutely at one's mercy and wring out of them their very last penny. The trick is to induce people by some means or other to sell not only shares which they do not possess, but shares which it is quite impossible for them to get at any price, so that they are eventually forced to come to the purchaser and ask him how much he requires to be paid for their failure to deliver what was sold to him. One of the most celebrated corners was the Warner Rig, which occurred in 1890, and has been since known as "Warner's safe cure for bears." "Warner's Safe Cure" was a company with a capital of £700,000, which was offered for public subscription but not very eagerly taken up, and when it was found that notwithstanding this the £10 shares were quoted at about £2 premium, many people considered bear sales were perfectly safe. The promoters, however, saw their opportunity and allotted large numbers of shares to themselves, and bought many others, so that the price rose to £5 premium, and many jobbers sold bears. It soon became evident that the corner was complete, and when after much delay the special settlement day was fixed, the price stood at £130 per £10 share, although almost immediately afterwards it fell to par.*

I will now explain what is meant by "options." On payment of a certain sum it is possible to obtain an option either to "call" (*i.e.*, have the right to purchase) or to "put" (*i.e.*, have the right to sell) a certain amount of stock at an agreed price, at some future date which is also agreed. There are single options or double options, the latter giving the holder the right to either a put or a call as he may desire. These options are for an agreed time, as, for instance, three months. Suppose I have a put option for £10,000 of stock at 95 for three months. This will give me the right at the end of the three months, but not in the interim, to sell my stock at 95 to the jobber with whom the option is open, although the price may then be much lower. One occasionally sees a statement in the paper to the effect that the price of a certain stock was lower, owing to the fact that it was known that a number of "put options" matured. This means that as the market

* An excellent description of a "Rig" is given in Harold Frederic's well-known novel "The Market Place."

price was lower than the option price, there were many holders of put options who, having already purchased the stock, would certainly exercise their option to sell at the option price. The grantors of the options, being forced to buy the stock, will probably sell it as best they can, the result being a further fall in the quotation. It may, however, be arranged that prices are so manipulated as to discourage the option holders from exercising their options. These options are for the most part held by professional speculators, who are thereby enabled to insure themselves against too great a loss. Thus, if a speculator purchases 1,000 shares at £5 each and at the same time obtains an option to put them at £5, he can carry them over either until he has a chance of selling them at a profit or until his option expires, when he sells them at the same price as he paid for them, and thus loses only his expenses of carrying over, cost of option, and the brokerage fees.

The expressions "call of more" and "put of more" merely signify the right to buy or sell further amounts of stock or shares on the same conditions.

Another class of option dealing which is of quite a recent growth consists of giving to allottees the right to apply for a further number of shares (in proportion to their holding) at some fixed price over a certain period. The following extract from a recent prospectus will explain their nature :—

"Each allottee of the shares now offered for
 "subscription will be entitled to a call from this
 "Company for two years from August 24th, 1909 (the
 "date of the incorporation of the Company), of one
 "5s. share at par for each share subscribed and
 "allotted."

This method of granting option certificates is becoming quite popular in the West African (Jungle) Market, and the said certificates, in some cases, command a ready sale. The quoted prices of these certificates only represent the premium, it being optional to the buyer to call the shares or not; should he do so he will then have to pay the issue price to the Company.

Another class of Stock Exchange speculators are known as "stags." Stags are people who apply for new shares or stock, hoping that the price may go to a premium.

Many people, thinking the recent Argentine Loan was a very promising issue and likely to go to a premium, applied for some. They paid their application money and probably got an allotment, although not for the full amount for which they had applied. Then finding that it was quoted at a premium they sold their allotment and so made a profit. That is the operation that is generally referred to as "stagging." You will readily understand that the operation of stagging is always liable to weaken the price of new issues. It often happens that a perfectly good new issue may be stagged by an enormous number of people who apply for amounts merely with the hope of selling out at a small profit. Directly the allotments come out they rush off to sell, and consequently the price falls rapidly, and sometimes the loan remains discredited in consequence for a considerable time. There are other operations in connection with stagging. For instance, you very often find that a new loan before its appearance may be quoted at a premium or discount, which means that a certain amount of business has taken place in it beforehand. In fact when new issues are made it is quite usual to "support the market," as it is called, in order to keep the price steady. Some people sell stock with no intention of applying for it, simply hoping that the price will fall when the allotments come out, and so afford them an opportunity of buying at a lower price. This business may be either for what is called the "special settlement" or for cash. The special settlement is a day arranged by the Stock Exchange for the settlement of all bargains in that particular new issue, and a purchaser for special settlement will not have to pay until that day arrives; this might be in a very short time or as long as two or three months afterwards.

I have already explained what is meant when the prices of stocks and shares are marked *ex div.* or *cum div.*; somewhat similar expressions are *ex rights* and *cum rights*. The rights generally refer to new issues of stocks and shares which are made at lower prices than those already quoted, and therefore are in the nature of a bonus. Suppose, for example, a company with an issued capital of 50,000 shares of £1 each has paid such favourable dividends that the quoted price is £10. Now, if the company requires fresh capital it may decide to obtain it by the issue of further shares (say 10,000) at par, which it will offer to the existing

shareholders *pro rata*, that is, in proportion to the number of shares held—each five shares held entitling the holder to subscribe for one new share at par. It is evident that in those cases where the right to apply for the new issue at par has not yet been exercised, the shares must be worth more than those in which the right *has* already been so exercised. If you held 50 of these shares, which, immediately upon its becoming known that a new issue *pro rata* was intended, were quoted at $10\frac{1}{2}$, your total holding would be worth £525. After you had applied for the 10 new shares at par, your 60 shares would be *ex rights*, and would be worth something less than £10 each.

You will sometimes read in the paper that a certain member of the Stock Exchange has been “hammered.” This means that he has defaulted, and, consequently, has been dismissed from the Exchange. The manner of his dismissal is somewhat curious:—The head Stock Exchange waiter, before making the declaration of default, strikes three blows with a mallet on the side of a rostrum in the Stock Exchange to attract the attention of members; hence the origin of the term hammered. A client, however, must remember that a broker is merely his agent, and he should therefore write to the official assignee and insist on the jobber settling his bargain, but it is always advisable to consult another broker as to the best course to pursue.

TENTH LECTURE.

Stock Exchange Securities.

(Concluded.)

IN my last lecture I gave some particulars as to the manner in which purchases of Stock Exchange securities are carried out in the London market. As it will be absolutely necessary for anyone who has to attend to investment business to understand the various points which arise in connection with similar purchases in other markets and bourses of the world, I will now endeavour to explain some of the more important of these. In the London market purchases are nearly always made at what are called "flat prices," that is to say, the stock or bonds are purchased including all accrued interest or dividend. Although the purchase may be made within a few days of the date when the next instalment of interest becomes due, it is understood that the price includes the proportion of interest which has accrued up to that time. To understand better what this means, let us take an example:—Suppose that I had purchased £100 Irish Land $2\frac{3}{4}$ per cent. Guaranteed Stock on the 1st October, 1908, it would have cost me at the quotation then ruling about $89\frac{1}{4}$, but, as the next payment of interest was due on the 1st January, 1909, there was obviously a certain amount of interest already included in the price, namely, that accruing in the three months from the 1st July to the 1st October, and this would be equal to $\frac{2\frac{3}{4}}{4}$, or $\frac{11}{16}$. Therefore, although I paid $89\frac{1}{4}$, $\frac{11}{16}$ ths of it was really accrued interest, and my net price was $88\frac{9}{16}$. Then, when I receive my first half-year's dividend of $1\frac{3}{8}$ (*i.e.*, half of $2\frac{3}{4}$), I must only credit myself with $\pounds\frac{11}{16}$ interest, and the balance I must treat as

returned capital. You will see that it is really an absolute necessity to do this if the book-keeping in reference to investments is to be correct. For instance, you might buy a 4 % bond on which the interest became due only a week after you purchased it. In such a case, the half-yearly instalment of £2 received almost directly, although nominally interest, would be nearly all returned capital, and should be treated as such in your books. You must not allow it to go through your revenue account as interest; it is merely a return of part of the purchase price. One difficulty which presents itself is that all the interest you receive is charged with income tax, although, clearly, it is only part of your capital which is being returned to you, so that there is an actual loss of capital to that extent, and this should be allowed for in the purchase price. For instance, if a 4 per cent. stock is offered cum. div. at 103, or ex. div. at 101, it is obvious that the latter is nearly $\frac{1}{8}$ per cent. cheaper, although at first sight the quotations would appear to be the same.

A "firm" price is one which includes no accrued interest, any such amount being paid as an addition. This method of quoting prices is usual on the Continent, but is quite the exception in London, one of the few well-known examples being Indian Rupee Paper. If you will look at the first group of securities mentioned in the *Daily List* you will see that the price of the $3\frac{1}{2}$ per cent. Indian Rupee Paper is about £63. This is not so cheap as it looks, however, as the rupee, although originally worth about 2s., so that 1,000 rupees would be equal to £100, at the present time is worth only about 1s. 4d., thus making 1,000 rupees worth about £66 $\frac{2}{3}$, and the price, instead of being at a discount of 37 per cent., is equivalent to about 94 $\frac{1}{2}$. As already stated, the price of Rupee Paper is a firm one, so that if you purchase at 63 you must pay an addition equal to the accrued interest in rupees at 1s. 4d. each. Some years ago it was the custom to charge the accrued interest on Rupee Paper at the rate of 2s. per rupee, notwithstanding the fact that at one time the actual value of the rupee was as low as 1s. 1d.,* so that you will readily understand that the price then paid for accrued interest was much more than the amount received as such, and therefore account had to be taken of this in the price. At the present time the

* The average rate of exchange for India Council Bills and telegraphic transfers was in 1894-5 = 13.101d.; 1895-6 = 13.638d.; 1896-7 = 14.491d.

fluctuations in the value of the rupee are very slight, and therefore the amount paid as an addition to the price is almost exactly the same as the amount eventually received as interest, except that as already explained, income tax is deducted, and in this case the Indian Income Tax of about 6*d.* in the £1 is charged as well as the English Income Tax.*

I have explained that the rupee is no longer subject to extreme variations in value, and that the average is about 1*s.* 4*d.*, but as all the interest is, in the first place, payable in India in rupees, the actual value of the interest to be received over here is subject to any fluctuations in the rate of exchange, and these should be allowed for when considering the advisability of an investment.

India Government Rupee Loans can be held either in the form of Promissory Notes or Registered Stock. The former can be converted into Stock at the India Office, Bank of England, or on the other hand Promissory Notes can be obtained in exchange for Stock on payment of a fee of two shillings per note issued. Dividends are paid by means of Bills of Exchange payable in India, known as "Interest Bills," which are usually sold in London for sterling at the exchange of the day. For the purpose of preparing the dividends, Promissory Notes must be left at the Bank of England for at least seven days.

Enfaced Paper is the term applied to those Promissory Notes where a notification is printed on the face that Interest is payable in London by draft on Calcutta. In the case of the 1854-5 $3\frac{1}{2}\%$ Loan, Certificates to Bearer are issued with coupons attached, and these Certificates can be converted into Stock at the Bank, but Stock cannot be exchanged for Loan Certificates.

Reverting once more to this question of deduction of Income Tax from that portion of the interest which represents return of capital, I may mention that in one case that came under my notice the price was a firm one, that is, plus accrued interest, and when the contract note came in a demand was made, not for the full interest accrued, but for that amount less tax. This, to my mind, is the correct method of charging accrued interest, as it is difficult to see

* A rupee consists of 16 annas. each anna contains 4 pice and there are 3 pice to the pice, therefore there are 192 pice to each rupee. The Indian Income Tax is at the rate of 5 pice per rupee, which is approximately equal to 6*d.* in the £1.

why the seller in these cases should escape payment of tax and the buyer should be subjected to the consequent loss.

If we purchase bonds from New York—I do not mean purchase them in the London market, but purchase them from New York direct—we shall find that the price quoted to us will generally be “New York terms plus interest,” that is to say, a firm price. If the New York plus interest quotation is given it means that it is the price per cent. in New York. We shall still have to negotiate the rate of exchange, which will be an important factor in the case, and must be carefully considered before comparing the New York and London prices. If you look in any of the lists quoting New York prices you will find that up to the end of last year the prices given there for bonds were generally flat prices. In the *Commercial and Financial Chronicle*, for instance, there was always a note saying that the price was *flat* unless otherwise marked, an asterisk or other symbol showing where it was to be considered as a *firm* price. From the beginning of this year, however, the method has been changed, and now we have this note: “In accordance with “the new rule adopted by the New York Stock Exchange, “all quotations for interest-paying bonds are at a price to “which accrued interest must be added. The exceptions to “the rule are income bonds, and bonds on which interest is “in default. This method of quoting bonds became effective “January 2nd, 1909.”

In the case of Shares and Common stock, you will readily understand that it would be impossible to quote firm prices, because it is not known at what rate the dividend is to be declared, and, therefore, these prices are always quoted flat.

Another important matter is the method of calculating the accrued interest included in the price at the date of purchase. There are two ways in which this may be done. The first is to take 365 days to the year, and then calculate the number of days which have elapsed since the last interest payment. The ratio of this number to 365 will represent the proportion of a year during which such interest has been accruing. To take an example:—Suppose I had a 4 per cent. bond offered to me at 98 per cent. firm on the 27th October, and that the last interest payment was made on the 1st September. In such a case, in addition to the purchase price of 98, interest will be charged from the 1st September

to the 27th October. The number of days elapsed is 56, and, therefore, the calculation would be as follows :

$$\frac{56 \times 4}{365 \times 100} = 12s. 3d.$$

I should know, therefore, that I had to pay £98. 12s. 3d. for my bond, and when I received my first interest instalment of £2 there would be 12s. 3d. to be carried back to capital account.

Another method of calculating accrued interest, and, I think, on the whole, the more usual one, is to take the number of complete months which have passed since the last interest date and add the odd days. In this method each month must be considered as made up of thirty days, and the year, therefore, to consist of 360 days. For example, supposing I buy a 4 per cent. bond on the 12th November, and interest is paid half-yearly on the 1st January and 1st July in each year, the accrued interest will be reckoned as for 4 months 11 days, that is to say, from the 1st of July to the 1st of November will be 4 months and from the 1st of November to the 12th of November will be 11 days. Taking each month as 30 days, the interest for the fractional period will be :

$$\frac{131 \times 4}{360 \times 100} = £1. 9s. 1d.$$

In certain cases an inconsistency arises in calculating the accrued interest, whichever method is adopted. Thus a bond with interest due at mid-day on the 1st February and 1st August is purchased, let us say, at mid-day on the 31st January, that is one day before the interest is due. The number of days elapsed since 1st August is 183, which is more than half of 365, and consequently the accrued interest for a period one day short of half a year is considered as *greater* than the amount for the full six months. If the 360 days to the year method is employed the period elapsed is 5 months 30 days = 180. In this case the interest for a period one day short of half year is considered as *equal* to the amount for the full six months.

Even when you have calculated the amount of accrued interest which has to be added to the purchase price, you must not forget that you still have to consider the rate of

exchange for the whole transaction, the accrued interest being affected in just the same way as the capital value. You will, of course, simply add the accrued interest to the quoted price, and then work out the effect of the rate of exchange on the total amount.

In Germany it appears to be the custom, according to my own experience, to take both days inclusive when calculating the period for the purpose of accrued interest. In such a purchase as I have just described, for instance, the 1st to the 12th of November, instead of being reckoned eleven days, would be considered as twelve days. It is only a minor point, but one which occasionally causes trouble to those who are for the first time called upon to check such calculations.

Another somewhat curious thing is that there appears to be a considerable difference in the method of charging this accrued interest. When we say we will buy certain bonds at 98 plus interest New York, we mean that we will pay on an agreed date in New York 98 dollars per cent., and the correct proportion of interest in dollars which has accrued. The difficulty now to be considered is: Up to what date shall that interest be calculated? Evidently the correct course would seem to be to calculate the accrued interest up to the date of payment in New York. This, however, is by no means the invariable rule. In many cases, although the bonds are purchased for you in New York, yet you prefer to pay only upon the actual delivery of the bonds over your own counter. Your broker will probably be quite willing to arrange this for you, and will also arrange that accrued interest shall be payable only up to the date of the completion of the contract. Thus you will be receiving the interest earned by your bonds for, perhaps, a fortnight before you part with your money. This is an important consideration, and must be duly weighed when comparing prices offered by someone else, who very possibly adopts another method. Sometimes it is arranged that interest shall be calculated up to the date of shipment, whether payment is made at that date or not. There does not appear to be any rule in this important matter, and, therefore, purchasers should be very careful to have a fixed agreement with anyone through whom they do business as to the method to be adopted, otherwise it may prove the source of much tiresome correspondence. If payment is made at the time of delivery, a purchaser would be required to negotiate

the cable rate of exchange; if at the date of shipment then the exchange demand rate will be employed in the transaction.

There is also the question of insurance and postage. When bonds are shipped over from New York or the Continent, or from whatever centre you are purchasing them, they have to be insured and the postage paid. As to who shall bear the expense of this is generally a matter of agreement, but it is almost invariably borne by the purchaser.

I have already referred to the $\frac{1}{2}$ per cent. stamp duty on all bonds issued in this country.

A very important matter is the manner in which Foreign Bonds are quoted in the *London List*. You will find it is the general custom for the quotation to refer to the round number of standard coins of the particular country most nearly equivalent to £100 sterling; the price of American Railway Bonds for instance, as I have already explained, is for an amount of 500 dollars, which is the nearest equivalent to £100; 500 dollars, however, are worth at the par of exchange about £102. 14s. 10d. (*i.e.* @ 4·866564)—so that if you buy bonds in the London market you can afford to give what is an apparently higher price than you would if you bought in New York, because in London you are buying not £100, but £102. 14s. 10d. You have always to remember therefore that the London price is necessarily higher than the New York price. French bonds are always quoted here for 2,500 francs; German bonds for 2,000 marks; and Japanese bonds for 1,000 yen. If you take the par of exchange, that is to say the exact equivalent in gold between the coinages of the respective countries, how do they compare?

500 dollars at the par rate of exchange $486\frac{2}{3}$ would be £102. 14s. 10d.;

2,500 francs at the par rate of exchange 25·225 would be £99. 2s. 2d.;

2,000 marks at the par rate of exchange 20·43 would be £97. 17s. 11d.;

1,000 yen at the par rate of exchange 2s. 0 $\frac{1}{2}$ d. per yen would be £102. 1s. 8d.

What I want you to notice is that in some cases the equivalent is greater than £100, whilst in others it is less. If I buy American bonds on the London market I am really getting a better bargain than would at first sight appear,

because I am buying something which is worth at the par of exchange more than £100. In the same way if I buy a Japanese bond of 1,000 yen I am buying the equivalent of £102. 1s. 8d. If, however, I am buying francs or marks the difference is the other way. In the case of a bond for 2,500 francs we have to remember that the price paid is about $\frac{7}{8}$ per cent. dearer than it appears to be, and in a bond for 2,000 marks the price is as much as $2\frac{1}{2}$ per cent. dearer.

It may be advisable to give one or two actual examples of purchases of foreign bonds quoted in London, in order that you may clearly understand how to calculate the true net prices:—

German Imperial 3 per cent. Loan, quoted on the 16th August, 1909, @ 85-86 (London).

Interest is due 1st April and 1st October each year.

Assuming the price is $85\frac{1}{2}$, and without entering into any question of brokerage, stamps, &c., we have to see how such price compares with what we should have to pay if we were purchasing in Berlin.

In our London price there is 4 months' 15 days' accrued interest on 2,000 marks = 22.5 marks, which at the current rate of exchange of 20.44 = £1. 2s. Our net price is, therefore, £84. 8s. Now converting into marks at the rate $20.44 = 1725.14$, which is the price given for 2,000 marks.

∴ True net price = 86.257 per cent.

Thus we see that if these bonds had been offered at $86\frac{1}{4}$ (Berlin) + interest, the offer would be slightly more favourable to the purchaser than one of $85\frac{1}{2}$ (London).*

Japanese 5 per cent. Consolidated Loan, quoted on 16th August, 1909, @ $47\frac{1}{4}$ -48 (London).

Interest due 1st June and 1st December.

Assume the price is $47\frac{3}{4}$ (for a bond of 500 yen), and deduct the accrued interest in the price—1st June to 16th August—for 2 months 15 days = 5.2 yen, which at the exchange of 2s. $0\frac{1}{2}$ d. = 10s. 7d. Our net price is, therefore, £47. 4s. 5d. Converting into yen at rate of 2s. $0\frac{1}{2}$ d. per yen = 462.57 yen, which is the price given for 500 yen.

* It must be remembered that the bonds purchased abroad will not bear the English bond stamp.

∴ True net price = 92·514 per cent. This would be the equivalent firm quotation in Tokyo.

French 3 per cent. Rentes, quoted on 16th August, 1909,
@ 97·98 (London).

Interest due 1st January, 1st April, 1st July and 1st October.

Assume the price is $97\frac{1}{2}$, and deduct the accrued interest in the price—1st July to 16th August—1 month 15 days = 9·375 francs, which at the current rate of exchange $25·18 = 7s. 5d.$ Our net price for 2,500 francs is thus = £97. 2s. 7d., and converting into francs at $25·18 = 2445·7$ francs.

∴ True net price per cent. = 97·828. This would be the equivalent firm quotation in Paris.

Southern Railway Company 5 per cent. 1st Consolidated Mortgage Gold Bonds, quoted on 20th August, 1909,
@ 114·117 (London).

Interest due 1st January and 1st July.

Assume the price is $115\frac{1}{2}$, and deduct the accrued interest—1st July to 20th August—1 month 19 days = 3·4 dollars, which at the current rate of exchange $4·86·65 = 14s.$ Our net price for \$500 is therefore = £114. 16s. Converting this price into dollars at $4·86·65 = \$558·674.$

∴ True net price per cent. = 111·735, which is the equivalent firm quotation in New York.

It is important to notice the effect which a variation in the rate of exchange will have on the apparent price for which you purchase a bond. I have already given some explanation of the reason why the exchanges vary. The highest limit in our relations with America is about 4·90 dollars, and the lowest about 4·83 dollars. In purchasing bonds when the exchange is in our favour I should be credited with 490 dollars for a £100, but when it is against us I shall only be credited with 483 dollars for my £100. If there are 490 dollars to be reckoned as the value of £100 the equivalent of 500 dollars is only £102. 0s. 10d. If on the other hand there are 483 dollars to be reckoned as the value of £100 the

equivalent of 500 dollars is as much as £103. 10s. 5d. It will thus be seen that the same quotation for an American Bond may result in a difference in the sterling price of as much as $1\frac{1}{2}$ per cent. This point is important, not only when comparing offers made at London and New York prices, but also when comparing quotations made at different dates. You must also notice that in bonds for 500 dollars gold, we can never estimate the exact amount repayable; it may be anything between 102 and 103 $\frac{1}{4}$.

Necessarily there is often a difference in prices quoted in the various centres at the same time. It is possible for anyone who is in touch with these matters, and has the necessary business arrangements, to take advantage of these differences. For example, stocks may be bought in New York and sold in London, or *vice versa*, so as to make a small profit.

This naturally leads us to the question of "Arbitrage," which is a term signifying the calculation of the relative values of a security in two or more markets at the same time. Arbitrage dealings consist of the purchase or sale in one centre and the simultaneous re-sale or re-purchase in another centre, which, owing to a difference in the respective quotations, yields a profit to the operator. The important factor to be borne in mind is the rate of exchange, and this is the "Arbiter" between the two centres—hence the word Arbitrage.

You will occasionally see a statement in the daily papers somewhat as follows:—"American shares opened weak and slightly below parity." The meaning of this is that the London prices were slightly below those quoted in New York on the previous evening. Later in the day the opening New York prices are received and compared with those current in London.

It sometimes happens that a sterling bond has actually been sold abroad and is subsequently offered for sale to somebody resident in England. In a case that recently came to my notice, sterling bonds had been shipped to Canada and the holder in Canada wished to sell. The price was quoted in what doubtless appeared to him to be the natural manner, namely dollars. Now had the seller merely said: "I want a certain number of dollars for my £100 bond," there would of course have been no difficulty, as we should then merely have

calculated at the current rate of exchange the sterling amount necessary to purchase a bill for that amount of dollars payable in Canada. In this particular case, however, the quotation was 94, plus interest, Canadian terms. What does this mean? It is first necessary to decide on the number of dollars equal to £100. This was of course a matter of arrangement, and in this case the par of exchange was agreed upon, viz., 486 $\frac{2}{3}$. Having now obtained the means of ascertaining the number of dollars payable in Canada the actual price was calculated at the current rate of exchange. The calculation is as follows:—

£100 at the par rate of exchange	...	...	\$486.66
Value of \$486.66 @ 94 %	...	...	\$457.46
Interest from 1st January to 3rd March, @ 4 %			3.35
(=2 months 2 days = $\frac{62}{360}$)			
TOTAL COST			\$460.81
Current rate of exchange 4.88 (say).			
Value in Sterling of \$460.81 @ 4.88...	...	£94	8 7

which is the amount due exclusive of any brokerage, &c., payable.

You must not take it for granted that this is the only method by which such a purchase could be carried through. It might be agreed that the £100 should be taken as a number of dollars calculated at the current rate of exchange instead of the par rate. You will thus see that whenever a sterling bond is purchased in a foreign or colonial market great care must be taken to ascertain the exact manner in which the purchase money is to be calculated.

NEW ISSUES.

There are, of course, a great number of questions to be considered when deciding as to whether an investment in any new issue is advisable. Most of these points, however, I could only explain if writing for the more advanced Part IV. students. I must confine my attention, therefore, to such information as will be necessary for Part II. students, whose knowledge, I take it, must be sufficient to enable them to undertake any of the practical work which may be deputed

to them by those who are considering the advisability of an investment. One of the first points which arise is as to the amount of interest which is due to be received at the first interest date. The purchase money for a new issue is almost invariably required to be paid by means of a series of instalments spread over a certain period, which is often a considerable time. The first instalment is generally 5 per cent., and this is the minimum amount allowed under the Companies Act; but, of course, there is no such restriction in the case of loans made by Governments, Corporations, &c. The remaining instalments of, say, 20 to 25 per cent. each are due on certain dates specified in the prospectus. Now the question arises—When will the first payment of interest be made, and for how much will it be? The two most usual methods are (1) Interest to be paid at the agreed rate calculated from the dates of the respective instalments. (2) Interest for a full half-year or other period to be paid on the recognized interest date. In the first case no complications of any importance arise, the amount to be received being the correct amount required in respect of the various amounts invested, and the price paid a true net one.*

In the second case, however, there may be, and generally is, a hidden bonus in the offer, and as a consequence the security is cheaper than at first sight it appears to be. This can be best explained by means of an example. A 4% bond issued at 95% on 1st December, 1908; instalments due as follows:

- 5% on application.
- 15% on allotment.
- 25% on 15th January, 1909.
- 25% on 16th February, 1909.
- 25% on 16th March, 1909.

Interest due 1st April, 1st October, a coupon for a full six months interest being payable 1st April, 1909.

The first thing to do is to find the average date of payment, which being an ordinary actuarial calculation I need not go into; you will find that by the usual formula for the equated time it works out to 30th January. Therefore in the ordinary

* It is in practice sufficient to take the issue price as "net" although there is a slight error involved. The interest is calculated on the actual instalments, although the issue price may not be par. Then, again, the true interest yield is affected by the date of repayment in all cases when the actual price is not par. These two points introduce calculations of a somewhat complicated nature, and, except in rare cases, can be safely disregarded.

way a purchaser would only expect interest from 30th January—1st April=61 days, *i.e.*, 13s. 4d., and had interest been payable on instalments only, this would have been about the amount he would receive. In the present instance, however, a full £2 is payable, and therefore the balance of £1. 6s. 8d. is in the nature of a bonus, or “interest accrued at the date of purchase,” as we should say. This surplus would in correct book-keeping have to be deducted from the price of 95 in order to obtain the true net price, as it really represents returned capital, and it is this reduced price which in practice we deal with in obtaining our interest yield.

Sometimes, as in the case of home railway stocks, a new issue is made and priority is given in allotment to existing stockholders. Suppose the price is par and the current quotation of the stock already issued is 110 or 115; in such a case you may very likely find that at the first succeeding interest date you will not receive the same rate of interest as is declared on the existing stock, and some time will have to elapse from the date when you applied for your new issue before that new amount of stock allotted to you will rank *pari passu* with the existing stock. You must notice that in such a case, the true price is *greater* than the issue price.

Issues are frequently made abroad for which, although no portion is directly offered in London, it is arranged that applications may be made through certain financial agents, who will forward them to the issuing house free of charge. In such cases the whole of the purchase price is usually payable in one sum instead of by fixed instalments as is the custom in this country. It will also be found that the issue price is almost invariably a firm one, *e.g.*, if the loan is offered at 104 per cent., the amount to be remitted will exceed that sum to the extent of any accrued interest to date. There are, however, certain cases in which an applicant is not required to pay accrued interest, although the issue is made at a firm price. This is best explained by means of the following example:—An application is made on the 15th of June for a new issue of 4% bonds at 101 per cent., on which interest is due 1st January and 1st July. In addition to the purchase price a sum of nearly 2 per cent. would be required for accrued interest. As, however, 2 per cent. would be repaid as interest within a few days, the more convenient method is adopted of allowing a rebate on the price to the extent of the interest for

the unexpired term, viz., 15th June to 1st July. Thus the amount payable will be £100. 16s. 6d. % instead of 101 %, and no interest payment will be made until the following 1st of January. It will be readily understood that this method is the more convenient and economical, as it avoids the double transmittance of the first interest instalment, with the attendant annoyance of income tax deduction.

Another point in connection with foreign new issues is that it is quite usual to ask the purchaser to pay half the foreign stamp duty applicable to that particular bond, the borrower paying the other half. This amount is generally only trifling.

Now as to the method of applying for a new loan. Enclosed in the prospectus or actually attached to it is what is known as a form of application, such as the following:—(see p. 207).

You will see there are spaces for full name, address, occupation, usual signature, and date, while underneath these, and perforated so that it can be easily detached, is a form of receipt which the bankers, to whom you send your application money, fill in and return to you. If the company is one registered under the Companies Acts, the amount you pay with the application must be, as I have already pointed out, not less than 5 per cent. Generally speaking the receipt portion of the application form is promptly returned, but this does not signify that you have been allotted any portion of the issue. Some little time later you will probably see a notice in the papers that "Letters of Allotment and Regret have been posted." This signifies that some applicants have received no allotment, and therefore the issue must have been over-subscribed. If, on the other hand, the notice reads "Letters of Allotment have been posted," it implies either that only the bare amount has been subscribed or that all applicants will receive some reduced amount. If you are duly allotted some stock or shares, as the case may be, it may be the full amount you apply for, or it may be less (the application form, you will notice, is so worded that you agree to accept, in case the issue is over-subscribed, such smaller amount as may be allotted to you) you will eventually receive a form of allotment letter which temporarily takes the place of the share or stock certificate to be received later after the various calls have been paid. The Letter of Allotment is usually in the following form:—(see p. 208).

No.

FORM OF APPLICATION FOR SHARES.

THE

COMPANY, LIMITED.

CAPITAL - - £1,000,000,

Divided into 1,000,000 Shares of £1 each.

To the Directors of the
GENTLEMEN,

COMPANY, LIMITED.

Having paid to your Bankers the sum of £ : : , being a deposit of 1/- per Share on.....Shares in the above Company, ^Iwe hereby request that you will allot ^{me}_{us} that number of Shares upon the terms of the Prospectus of the Company, dated.....19..., and ^Iwe agree to accept such Shares, or any less number that may be allotted to ^{me}_{us}, and to pay 2/- per Share on Allotment, and the balance if and when required in manner provided by the Prospectus; and ^Iwe request you to place ^{my}_{our} name on the Register of Members for the Shares so allotted.

Name (in full).....Address.....Profession or Occupation.....Usual Signature.....Date.....19...

No.

THE

COMPANY, LIMITED.

Bankers' Receipt for Deposit.

RECEIVED this.....day of.....19...
from.....the sum of £ : : being a deposit
of 1/- per Share on application for.....Shares in the above Company.

For

BANK, LIMITED.

STAMP.

This Form should be filled up and sent ENTIRE to
together with a cheque for the amount payable on application.

£ : :

THE COMPANY, LIMITED.

(Incorporated under the Companies Acts, 1862 to 1908.)

.....19....

SIR,

In reply to your application for Shares, I am instructed to inform you that the Directors have allotted you.....Shares of £.....each in this Company, and I have to request that, on or before the.....day of....., you will pay to the Bankers of the Company (BANK, LIMITED, E.C.) the sum of £....., being the amount of £.....per Share on the Shares so allotted.

Your obedient Servant,

.....

Secretary.

To.....

.....

.....

N.B.—Please keep this letter of allotment and the receipt for the amount payable as above until the Share Certificates are ready to be exchanged therefor, of which notice will be given in due course.

An allotment letter requires a sixpenny stamp, unless the nominal amount is under £5, when a penny stamp is sufficient. With a few exceptions allotment letters pass by delivery, *i.e.*, are negotiable instruments. It is always advisable to endorse allotment letters before selling or exchanging for scrip, as tiresome correspondence and delay are often thereby avoided.

The dates of the further payments to be made are generally stated in the prospectus; occasionally, however, the dates are left open, and it is intimated that each call will be made at intervals of not less than, say, two months. Again, it sometimes happens that it is not intended (in the case of share issues) to call up all the capital, at any rate for the time being, perhaps only 20 per cent. is to be paid up, and this is definitely stated, with the proviso that due notice will be given of any further call when such is deemed expedient.

After the amount due on allotment has been paid, notice is generally given that scrip certificates will be ready on a certain date in exchange for allotment letters. These scrip certificates must be carefully preserved until the Definitive Bonds or Stock Certificates are ready, which is not until after the price is fully paid. The stamp on scrip certificates is at the same rate as that just given in the case of letters of allotment. The following is an example of a scrip certificate :— (see p. 210).

It is important to remember that a scrip certificate, such as this, is a negotiable instrument, and it is therefore essential that great care be taken of it.

When applying for an allotment in any new issue care must be taken that the application is made in time. The prospectus will state the date at which the lists open and the latest date at which they will close. If it is likely to be a popular issue application must be made promptly because the issuing banks are not bound to keep the list open for the full time. Possibly it may be open only for a few hours, and if the issue is largely over-subscribed the quotation is almost certain to go to a premium. If, on the other hand, the issue is not attractive and it is under-subscribed, the quotation will go to a discount. At any time prior to the posting of the allotment letter accepting the

When remitting the Instalments, this Certificate must accompany the remittance and in all communications respecting this Certificate, please quote the number and amount. The Receipts must not be detached from the Certificate.

£100

No. 29134

CITY OF OSAKA 5% STERLING BONDS

FOR

£3,084,940

Issued at 97 per cent.

Scrip Certificate for £100.

The Bearer of this SCRIP CERTIFICATE has paid in respect of **One Hundred Pounds** of the above Issue, the sum of **£25**, leaving a balance of **£75** payable as follows:—

£25 % on 22nd June, 1909.
£25 % on 9th August, 1909.
£22 % on 15th September, 1909.

After payment of the above instalments the Bearer will be entitled to a duly stamped **Bond** or **Bonds** in exchange for this Scrip Certificate. Notice will be given by advertisement in *The Times* when the Bonds are ready for delivery.

Default in payment of any instalment will render all previous payments liable to forfeiture.

For Parr's Bank Limited,

Registered

W. L. Horn

4, BARTHOLOMEW LANE,
LONDON, E.C. 4,
17th May, 1909.

R. W. Whalley
General Manager.

F. B. Lygier
Manager.

As Agents with the Associated Banks for the Industrial Bank of Japan, Limited.

RECEIPT FOR INSTALMENT OF 25 per cent. DUE 22nd JUNE, 1909.

Received the sum of **Twenty-five Pounds** being the Instalment due 22nd June, 1909.

For Parr's Bank Limited,

£25.

R. W. Whalley

RECEIPT FOR INSTALMENT OF 25 per cent. DUE 9th AUGUST, 1909.

Received the sum of **Twenty-five Pounds** being the Instalment due 9th August, 1909.

For Parr's Bank Limited,

£25.

9-AUG 1909

R. W. Whalley

RECEIPT FOR FINAL INSTALMENT OF 22 per cent. DUE 15th SEPTEMBER, 1909.

Received the sum of **Twenty-two Pounds** being the Final Instalment due 15th September, 1909.

For Parr's Bank Limited.

£22.

CITY OF OSAKA 5% STERLING BONDS.

Issue of £3,084,940 5 per cent. Sterling Bonds at 97 per cent. No. 29134

Coupon for Two Pounds Ten Shillings being Interest so
1st November, 1909.

Payable at PARR'S BANK LIMITED,
4, BARTHOLOMEW LANE, LONDON, E.C.

Payable 1st November, 1909.

£2 10s. Od.



offer of subscription, the application can be withdrawn, by means of either a written or verbal intimation.*

Another method of applying for new stock is by means of what is known as "tender." If the minimum subscription price at which tenders are to be made is stated to be 90 per cent., then it is to be understood that no one can apply for it under that price, and the difficulty is to ascertain the lowest price at which you will obtain a satisfactory allotment. Recently this method has not been nearly so popular as formerly, but with changed conditions it may very possibly come into favour again. The method of making application for an issue by tender is best explained by means of an example. In May 1908 the Metropolitan Water Board gave notice that they were prepared to receive at the Bank of England tenders for £1,500,000 Metropolitan Water Board "B" Stock. The following is the form of application:— (see p. 212).

Tenders were to be delivered at the chief office before 2 o'clock on Thursday, 7th May, and a deposit of £5 % on the nominal amount of the stock tendered for was to be paid at the time of delivery of the tender. The minimum price, below which no tender would be accepted, was £90 %. Tenders were to be for even hundreds of stock, and prices offered were to be in multiples of sixpence. Such additional multiple of sixpence to the minimum price of £90 % was to be paid on the 18th of May, at which date an instalment of £25 % became payable. The prospectus stated that: "In the event of the receipt of tenders for a larger amount of stock than that to be issued, at or above the minimum price, the tenders at the lowest price accepted will be subject to a *pro rata* diminution." This statement indicates the general system employed in allotting stock subscribed for by tender. If the issue is not over-subscribed every applicant receives a full allotment in accordance with his own offer, which may be anything from 90 % upwards, and it may here be mentioned that there are almost invariably some applications at absurdly high prices. Should the issue be over-subscribed, applicants at the higher prices are first allotted in full. In making such

* See *Henthorn v. Fraser* [1892] 2 Chap. 27 (at page 33), where Lord Herschell said:—"I should prefer to state the rule thus: where the circumstances are such that, according to the ordinary usages of mankind, the post might be used as a means of communicating the acceptance of an offer, the acceptance is complete as soon as it is posted."

METROPOLITAN WATER (B) STOCK.

ISSUE OF £1,500,000 STOCK.—Minimum Price, £90 per Cent.

To the METROPOLITAN WATER BOARD,

c/o The Chief Cashier, Bank of England,

London, E.C.

.....hereby tender for (a) £.....pounds of the
say.....pounds of the
above-named Stock, for every hundred pounds of which.....willing
to give the sum of.....pounds.....shillings
and.....pence (£.....); and.....hereby
engage to pay the balance, as it shall become due, on any allotment that may be
made in respect of this tender, in accordance with the terms of the Prospectus
dated 1st May, 1908.

The sum of £....., being the amount of the required
deposit (b) (namely, £5 for every £100 of Stock tendered for), accompanies
this tender.

Signature.....

Name of Applicant)
in full)

Communications to be)
addressed to)

at

Date.....May, 1908.

- (a) Tenders, which should be sealed, must not be for less than £100 of Stock, and must be for multiples of £100, and at prices which are multiples of Sixpence. No Tender will be received after TWO o'clock on Thursday, the 7th May, 1908.
- (b) The deposit must accompany this tender, but *should not be enclosed herein*. If tender and deposit be sent by post, both should be enclosed in one covering envelope. Where several tenders are made, one cheque only, for the total deposit, is necessary. Cheques should be made payable to "bearer," not to "order," and should be crossed thus:—

Bank of England,

a/c Metropolitan Water Loan.

allotments there is necessarily some price at which there is a greater amount applied for than the stock remaining to be allotted, and this stock is therefore allotted *pro rata* to the applicants. This will be more readily understood by reference to the result as given in the *Economist* for May 9th, 1908:—
 “Metropolitan Water Board (B) Stock. Tenders for
 “£1,500,000 were opened on the 7th inst. at the Bank of
 “England, and amounted to £1,913,300, at prices varying
 “from £92 to £90 (the minimum). Tenders at £90. 0s. 6d.
 “will receive about 65 per cent. of the amount applied for,
 “those above that price being allotted in full. The average
 “price obtained for the stock is £90. 2s. 5.95d.” In most cases where a big issue is offered for tender a number of intending applicants for large amounts agree to join together and put in for the stock at the same price or prices. These people of course have the means at their command for making a very shrewd estimate of the most suitable price, and it is therefore often advisable to join them if a large amount be required.

All public issues made by limited liability companies registered under the Companies Acts are bound to comply with various conditions, some of the most important of which are contained in the Act of 1900. Prior to the passing of this Act there was no restriction as to the amount on which directors could proceed to allotment. An imposing prospectus would be issued setting forth the intention to offer £1,000,000 in fully paid shares, and the nature of the proposed undertaking might be such that, provided an amount of about £1,000,000 were obtained, there would be good reason to anticipate success. If, however, as sometimes happened, the issue failed to attract sufficient attention, the subscriptions might have been for such a meagre amount that there would not be more than sufficient to pay preliminary expenses, and the company consequently would be practically bankrupt directly it was formed. A remedy for this most unsatisfactory state of affairs was attempted in Clause 10 of the Act referred to, which provides that: “Every prospectus . . . must state . . . (d)
 “the minimum subscription on which the directors may
 “proceed to allotment, and the amount payable on application
 “and allotment on each share; and in the case of a second or
 “subsequent offer of shares the amount offered for subscription
 “on each previous allotment, and the amount actually allotted;
 “and the amount, if any, paid on such shares.”

The ingenuity of company promoters has, however, enabled them to circumvent this provision by making a statement in their prospectus somewhat as follows: "For the purpose of complying with the provisions of the 1900 Companies Act, it is hereby provided that the minimum amount on which the directors will proceed to allotment is £50. The directors, however, have no intention of proceeding to allotment unless the full amount offered is subscribed for." Needless to say the directors are only too liable to alter their intentions if they find that the issue has been poorly subscribed for, and that unless allotments are made there will be no money to pay the expenses already incurred. The same Act also provides that all commission payable by way of underwriting shall be fully set out in the prospectus. This also is a very wise provision and it is always appreciated by any one who carefully studies a prospectus as he should do before offering any opinion as to the merits of the investment. This underwriting commission is a percentage paid to some person who agrees to take up a certain number of shares or stock in event of the full amount not being applied for by the general public. If the whole of an issue is underwritten at, for example, 5 per cent., and only 75 per cent. is applied for by the public, then each underwriter will be called upon to take up his share of the balance of 25 per cent., *i.e.*, one-fourth part of the amount he underwrote, and his underwriting commission will represent, therefore, a discount of 20 per cent. on such amount. It may, however, happen that only 50 per cent. of the whole issue is underwritten and then in such a case as that above indicated each underwriter would be called upon to take up one-half of the amount he underwrote. Where the underwriting commission is very high the inference is that the issue is not sufficiently attractive to tempt the ordinary investor to any very great extent. Naturally the underwriters in such cases will do all in their power to influence the largest possible amount of application.

It is not, however, only the issues of registered companies that are underwritten. It is comparatively seldom that any public issue is made without underwriting. Issues of Indian and Colonial Government Stocks are constantly made in this way, the reason being that there is always a risk of failure owing to some unforeseen accident, and experience has taught that it is wiser to avoid all such accidents by means of

an insurance of which the premium is represented by the underwriting commission.

The reason why I have gone so carefully into this matter is because of late years it has been clearly recognized that the business of underwriting to a limited extent is entirely suitable for insurance companies. For example, suppose there is a large issue of a Colonial inscribed stock for which your company would in the ordinary course apply to the extent of £50,000, but of which it would not object to hold £100,000. The underwriting commission will very probably be 1 per cent., and it is practically impossible that the issue should be a complete failure. If your company underwrite £100,000 at 1 per cent., and the public apply for only 80 per cent., of the total issue, you will be called upon to take up £20,000, which you will consequently obtain at a price equivalent to 5 per cent. discount. The issuers of such loans are generally quite willing to allow underwriting to the big insurance companies, because they know that whatever amount they take up will almost certainly be held as a permanent investment. In the case of an ordinary financier who has underwritten and been called upon to take up a considerable amount, the case is somewhat different, however, as he will probably be forced to sell his stock as soon as possible, and this has a weakening influence on the price. Sometimes a condition of the underwriting is a firm application, that is to say, the commission will only be allowed provided that it is agreed to take up the whole amount underwritten regardless of the amount applied for by the general public, or again it might be conditional on a firm application for 50 per cent. or some other proportion. More usually, however, the insurance company itself wishes to make certain of some allotment, and therefore asks for (and generally obtains) an undertaking that in any case it shall be allotted some minimum amount. Such arrangements as these must be most carefully explained at the time, as otherwise it may happen that through some misunderstanding the amount allotted will be the minimum firm amount asked for in addition to the proportion left on the hands of the underwriters. The expression usually adopted to indicate the amount of the issue not taken up by the public is "Underwriters have been stuck with so much per cent."

The following are alternative examples of underwriting letters:—(see pp. 216 and 217).

Messrs. & CO.,
 GRACECHURCH STREET,
 E.C.

London,.....19....

GENTLEMEN,

Referring to the proposed issue of £1,000,000 of
3½ % Stock at 98 for the consideration herein mentioned,
 we hereby underwrite and guarantee the subscription (by persons
 other than underwriters) in full of the said.....
 provided that our liability does not exceed.....
 to the nominal amount of £10,000, and we undertake to apply
 for.....to that amount and to accept allotment
 of the same or any less amounts that may be allotted to us,
 and in the event of our omitting to apply before the time
 fixed for the closing of the subscription for such allotments or
 either of them, we authorize you to apply in our names for
 the same or any less amounts, and we undertake to pay the
 deposits and instalments as and when they become due. All
 allotments to persons other than underwriters shall be applied
 in relief of the underwriters in proportion to the amount
 guaranteed by them respectively, and it is understood that the
 public issue will be made before 19... or this agreement will
 become void.

The consideration to be paid us by you for the above
 is a commission of 1 % upon the amount of £10,000 underwritten
 by us.

We are, Gentlemen,

Yours faithfully,

6d.
 STAMP.

We beg to acknowledge the receipt of the above letter,
 and agree to the terms thereof.

& CO.

Address for Telegrams:

.....

LONDON, E.C.

Telephone No.....

.....19...

PRIVATE AND CONFIDENTIAL.

DEAR SIR(S),

£2,000,000 5% Loan.

We beg to advise that we have ceded to you
the Underwriting for:—

£10,000

of the above loan for a commission of 2 %.

It is agreed that you will undertake to apply for that
amount when called upon by us to do so.

It is understood that you will effect no sales in respect
of your Underwriting until after the general allotment, and
that no part of your Underwriting is to be ceded to third
parties.

Kindly confirm to

Yours faithfully,

.....

MESSRS.

& Co.,

MOORGATE STREET, E.C.

It sometimes happens that there is a new issue of shares which are to be converted into stock at some subsequent date. As an example I may refer to the Burma Railways Company's issue of 100,000 ordinary £10 shares in June, 1903. The price of issue was £10. 4s. per share, and it was stated in the prospectus that after the 1st of January, 1909, the new shares would be converted into stock ranking *pari passu* in all respects with the existing £2,000,000 of ordinary stock. Until that date the holders of such shares were to receive a special dividend at the rate of 4 per cent. per annum, instead of the guaranteed interest of $2\frac{1}{2}$ per cent. per annum and the share of surplus profits.

On page 4 of the *Daily List* you will see under Home Railway Preference Stocks: "Caledonian 4 per cent. Convertible Preference Stock." In this case holders may at any time (except when the registers are closed) exchange their stock for a like nominal amount of ordinary stock. As the present price of the ordinary stock is considerably below par, and the dividend is only 3 per cent., there is no inducement to convert, but the option is nevertheless of some value, as should the net earnings of the company enable it to pay increased dividends, the price of the ordinary stock might easily rise to such a figure as would make the exchange profitable.

Bonds are sometimes issued with the right of converting into inscribed stock on certain terms at subsequent dates, and in such cases it is necessary to make various calculations for the purpose of disclosing the exact nature of the offer. An example of this is the "Southern Nigerian Government 4 per cent. four-year Convertible Bonds," issued in May, 1908, at a price of 99 per cent. The holders of fully-paid scrip certificates and of the bonds have the option at any time prior to the 15th August, 1911, of converting the same into $3\frac{1}{2}$ per cent. inscribed stock repayable at par at any time between 1930 and 1955, on the following terms:

At any time between the following dates :—

	Stock.
The 12th May, 1908, and the 15th February, 1909...	£104
The 16th February, 1909, „ 15th February, 1910...	£103
The 16th February, 1910, „ 15th February, 1911...	£102
The 16th February, 1911, „ 15th August, 1911 ...	£101
for each £100 of Debentures.	

A most important point to notice with any new issue is the amounts authorized, issued, and outstanding. Thus, for example, you may find an issue of £100,000 of mortgage debentures for which, in your judgment, there is ample security, but it may be that the full authorized amount is £250,000, so that there is still £150,000 outstanding which may be issued at some later date. Although the property mortgaged may be ample security for the £100,000, it does not follow that the position will be so satisfactory when the full authorized amount has been issued. It may, of course, happen that when such subsequent issue is made further valuable security may be available, or there may even be a condition that such shall be the case. When the whole of an authorized issue of mortgage debentures has been made the mortgage is referred to as "closed."

In explaining the meaning of *cum* rights and *ex* rights, I referred to *pro rata* allotments of new shares, and I must again call your attention to this in connection with the sale of such rights. In November last the Ordinary Stockholders of the London, Tilbury and Southend Railway Company were offered £246,600 of new stock at par, *pro rata* to their holding; the new issue was entitled to rank for dividend as from 1st January, 1909. The amount of allotment worked out at about 16 per cent. to each holder of original stock, the price of which at the time was about 106 per cent., but as always happens in such cases the market quotation for the new stock was somewhat less. I believe in this case it was very little above par, but the difference was to a large extent accounted for by the accrued dividend included in the old stock. In all cases of *pro rata* allotments care should be taken to check the amount allotted, as in case of mistake the issuing company must be at once communicated with. The next question to decide is whether the option shall be exercised. It may be that, although it is not convenient to apply for the amount offered, yet the option may be marketable. With the offer of the new stock, a letter is enclosed such as the following:—(see p. 220.)

If it is decided to take up the stock the form of acceptance should be filled in and despatched together with the necessary instalment of purchase price. If, on the other hand, it is decided to sell the rights, the form of renunciation must be filled in and handed to your broker for sale within a certain

FORM OF ACCEPTANCE OF STOCK.

To the Directors of—

GENTLEMEN,

Having paid to the Company's Bankers the sum of £.....
being a deposit of.....per cent. payable on application
for.....Stock in the above-named Company, I request
you to allot me that amount of Stock upon the terms of the Company's Circular,
dated....., and the Memorandum and Articles
of Association of the Company, and I agree to accept the same, and to pay the
balance of.....per cent. on allotment, and the remaining
instalments, both in respect of Capital and Premium, as provided by the said
Circular; and I authorize you to register me as a holder of the said Stock.

Name in full.....

Usual Signature.....

Address.....

Description.....

Date.....

FORM OF RENUNCIATION.

I hereby renounce my right to apply for the above Stock in favour of
..... of

Signature of Stockholder

Address.....

Gd.
STAMP.

period. If the nominal amount is £5 or over, the letter must bear a sixpenny stamp; if under £5 only a 1d. stamp is required.

It is sometimes arranged that in the event of the rightful parties not caring to take up the proportionate amounts to which they are entitled the balance so left over will be allotted to such stock or shareholders who give notice of their desire to take any additional allotments available.

It may be mentioned as a practical point that it is nearly always advisable to take up *pro rata* allotments rather than sell them. It is often more profitable to sell a portion of the original holding and replace the same by means of the new allotment; the difference can then be applied to writing down the ledger value of such stock.

I have already referred to special settlement days, but I must here point out that if purchases of new issues are made care must be taken to ascertain whether it is for cash or special settlement. If for the latter it may very likely happen that several instalments of the issue price will have become due before the date for the special settlement, but nothing will be payable by the purchaser for special settlement until that day arrives. It is only in the more important issues that the Stock Exchange Committee appoint a special settlement, and where no such appointment is made it is usual to buy or sell for what is known as the "coming out," which is the date when the stock or share certificates are ready for delivery.

You will often find that the instalments of the issue price, although payable at certain fixed dates may, if so desired, be paid up in full at a fixed rate of discount. This rate of discount is generally rather low, and consequently it is seldom advisable for an insurance company to take advantage of the right so to pay up; moreover, when purchasing new issues on the market at any time before the last instalment becomes payable, it is necessary to enquire whether any offer made refers to stock which has or has not been paid up. In the prospectus of a new issue you will often find a statement such as the following: "Application will be made in due course for an official quotation in the *Stock Exchange Daily Official List*." This is important, as unless the quotation is granted there cannot of course be such a ready market. The Committee of the Stock Exchange will not order a security

to be quoted in the *Official List* unless it be of sufficient magnitude and importance, and the application must comply with such conditions and requirements as may be ordered from time to time.

One often sees a reference to "watered capital." A company's capital is referred to as watered when the amount has been increased without a corresponding receipt of cash of an equivalent value. For instance, a company which is paying dividends at the rate of say 20 per cent. may decide to double the nominal amount of its capital without requiring any further subscription from the shareholders.

ELEVENTH LECTURE.

The Stock Exchange Daily Official List.

I THINK it will now be most convenient to take the *Daily List* and examine each group of securities mentioned therein, as this will provide me with a simple method of explaining many things which I find impossible to set out under any particular heading.

BRITISH FUNDS, &c.

In addition to the direct debts of the United Kingdom there are also several other loans which are absolutely guaranteed, and therefore may be considered as equally secure. I may say that, with regard to some of the less important foreign Governments, it is often argued that a guaranteed loan is possibly not so well secured as a direct obligation, since in the event of difficulties arising, the Government in question might continue to meet direct liabilities, even though it did not fulfil its guarantees. However this may be, it is of no importance whatever with regard to British Guaranteed Stocks, since there can never be any doubt whatever as to all obligations being absolutely fulfilled.

I have already spoken at considerable length of the $2\frac{1}{2}$ per cent. Consolidated Stock (usually spoken of as Consols) and the $2\frac{3}{4}$ per cent. and $2\frac{1}{2}$ per cent. Annuities in my lectures on the National Debt, and shall therefore commence here with the Irish Guaranteed Land Stock, of which there is quoted on the London market over £33,000,000.

As you probably know, this money is raised for the

purpose of making advances to people in Ireland who desire to become their own freeholders. The stock is either inscribed or in the form of certificates to bearer. The rate of interest is $2\frac{3}{4}$ per cent. and the stock is not redeemable until 1st November, 1933, after which date it may be redeemed at par at any time on three months' notice. The interest is payable out of the income of the Irish Land Purchase Fund, and if that income is at any particular time insufficient, the interest is to be paid out of the Consolidated Fund of the United Kingdom. Any sums so paid are to be treated as a temporary advance, and are to be made good out of the Guarantee Fund which has been formed under the direction of the Treasury, and into which is paid every year:—

1. The Irish Probate Duty Grant.
2. £40,000 from the Consolidated Fund.
3. The County percentages.

There is also between twelve and thirteen millions of Guaranteed Irish Land Stock, issued under the Land Purchase Act of 1891. This is quoted at Cork, Dublin, Glasgow and Liverpool, but not in London. The interest is at the same rate, viz., $2\frac{3}{4}$ per cent., but the date after which it may be redeemed is 1921 instead of 1933. You must notice that both of these stocks are not to be definitely repaid at the dates mentioned, the option being with the Government, and as they both stand at a considerable discount the dates of possible repayment have little effect on the quotations. You should also notice that the interest is paid half-yearly, not quarterly, as is the case with Consols. This point is of importance when comparing the relative prices. For instance, both stocks are quoted ex dividend on the 2nd June, and if you compare the prices on the 1st June, when they are both cum div., it must be borne in mind that, whereas Consols contain only two months' accrued interest, Irish Land Stock contains as much as five months'. By far the larger portion of the stock redeemable in 1933 is inscribed in the books of the Bank of England, but the twelve to thirteen millions which I referred to as formed under the 1891 Act is nearly all inscribed in the books of the Bank of Ireland.

The next two items in the list are the "National War Loan" and "Exchequer Bonds," of which I have already spoken; then follows Local Loans Stock, which I shall speak of in dealing

with Local Indebtedness. The Metropolitan Police 3 per cent. Debenture Stock, of which there is only £450,000, is not guaranteed, and there is seldom any dealing in it; the reason for its inclusion in this list is because it is inscribed in the books of the Bank of England.

The two issues of Canadian Government Bonds are for £1,500,000 and £1,700,000 respectively. They are guaranteed by the British Government, but both of them will very soon be repaid, the one in 1910 and the other in 1913. This difference in the year of redemption accounts for the variation in price; in other respects they are similar. In both cases there is a sinking fund of 1 per cent. per annum, which is paid by the Canadian Government into the Bank of England where it is accumulated to provide for the eventual repayment.

The next security in the list is the Egyptian Government 3 per cent. Guaranteed Loan. Even the most timid investor could hardly doubt the security of this loan, for the guarantee is not only by the British Government, but also by Germany, Austria-Hungary, France, Italy, Russia, and Turkey, and it is only in the case of Russia that the guarantee is not for the whole amount, but merely for one-sixth. The loan was in pursuance of the well-known Convention signed at London in March, 1885, by the above-named governments. It is in the first place secured by a fixed annuity of £315,000 per annum, constituting a first charge on the revenues assigned to the Preference and Unified Debts of Egypt. After paying interest out of the fixed charge the balance is applied to sinking fund purposes. Another point to be noticed about this loan is that the coupons are payable in London and Egypt in sterling, in Berlin at the exchange of the day, but in Paris at the very low exchange of only 25 francs to the £1. The loan is free from all Egyptian taxation, and the one disadvantage is the possibility of early redemption, the Egyptian Government having the right to repay on or after 15th July, 1910.

The next in order is the "Greek Guaranteed Loan." This loan was the result of the 1898 Convention between France, Russia, Great Britain and Greece, and of a Royal decree of the King of the Hellenes dated 4th May, 1898. It is absolutely guaranteed jointly and severally by the Governments of Great Britain, France and Russia; it is true that it

is also secured on certain revenues, but this is of little importance, because the guarantee of the various governments is absolute. You will observe that the amount issued is £6,023,700, of which £5,531,400 is outstanding (August, 1909). If you turn to the *Stock Exchange Official Intelligence* or some other book of reference you will find that the loan is in the form of £100 Bonds, and that repayment is made by means of a cumulative sinking fund of 1.1 per cent., which is applied to drawings at par or purchases under par; it is also stated that the sinking fund cannot be increased before 1st April, 1918, but after that date the Greek Government, with the consent of the three guaranteeing powers, will have the right to effect the conversion of the loan. Of course it will be recognized that the effect of the cumulative sinking fund will be to redeem an increasing amount of the loan in each successive year. In my previous remarks on bond issues and coupons I mentioned various conditions which it was important to notice. In this case you will find that coupons which are due and are not presented within five years, and drawn bonds not presented within 30 years of maturity, will be forfeited.

The next item is "£600,000 Mauritius 3 per cent. Inscribed Stock." Here there is an absolute British guarantee. The loan is repayable at par by means of a sinking fund of 1 per cent. per annum applied under the directions of the Treasury.

The "3 per cent. Guaranteed Transvaal Government Stock" is redeemable by means of a sinking fund in May, 1953, but the Transvaal Government reserves the right to pay it off at any date after the 1st May, 1923, on giving six months' notice. There is also an issue of £4,000,000 separately quoted, which is repayable in July, 1958. Both of these loans are absolutely guaranteed as to principal and interest by the Imperial Government.

Then comes the "Turkish 4 per cent. Guaranteed Loan." One curious thing in reference to this loan is that although the interest is absolutely guaranteed by France and Great Britain, there is no guarantee for the repayment of the capital. As, however, the interest is guaranteed until the capital is repaid, it follows that the security is quite sufficient; in fact, if it could be definitely ascertained that the capital would not be repaid for some long period the loan would be still

more attractive than at present. All the bonds have been drawn for repayment, but no actual repayment has been made since August, 1875. The original sheets of coupons were all used up some years since and, as a consequence, the bonds were very troublesome to deal with, because every time interest became due it was necessary to lodge the bonds at the Bank of England. New sheets of coupons were, however, issued for dividends due from 1st August, 1906.

Bank of England and Bank of Ireland Stock I have already dealt with in the earlier lectures.

I now come to the three Indian Government Stocks, which are for such large amounts that their importance is, perhaps, only second to that of Consols. You will notice in the first place that the interest is payable quarterly. The security is that of the Indian Government only, the British Government acknowledging no responsibility, but it is, of course, extremely unlikely that the latter would allow any default to be made. It is well to notice also that the borrowing powers for India have to be passed by the House of Commons.

The $3\frac{1}{2}$ per cent. Stock is not redeemable before 5th January, 1931, after which time it may be redeemed at par upon one year's previous notice by the Secretary of State for India. The 3 per cent. Stock is redeemable under similar conditions, not before 5th October, 1948, and the $2\frac{1}{2}$ per cent. Stock not before 5th October, 1926. The above three loans were all raised in England, but there are also the loans raised in India known as "Rupee Paper," for which the security is the same, but as they are payable in rupees and not sterling they are not so favourably regarded in this country. I have previously dealt with the main characteristics of these loans.

You will see that a separate column is devoted to the dates at which the various stocks are quoted x.d. or x.in., and I would point out that nearly all the securities in this group are so quoted about a month prior to the due dividend dates.

CORPORATION AND COUNTY STOCKS—UNITED KINGDOM.

You will observe that the first and by far the larger division of this group is headed "Free of Stamp Duty." Most of these loans are redeemable at the option of the borrowers at

any time between two given dates; thus Middlesex County Council $3\frac{1}{2}$ per cent. *must* be redeemed at par on 27th June, 1947, but *may* be redeemed at par at the option of the County Council on or after 27th June, 1927, on six months' notice.

The Corporation of London 3 per cent. and $3\frac{1}{2}$ per cent. Loans are in the form of bonds, and a note at the bottom of the page explains that they are subject to repayment by means of annual drawings; further particulars can be obtained by reference to *Burdett*.

The next foot-note (c) refers to loans which are repayable at any time after certain dates at the option of the corporations.

Paisley Corporation 3 per cent. Redeemable Stock, although included in the list as free of stamp duty, is, as explained in the foot-note, subject to stamp, but the cost of same is borne by the corporation; this is apparently a case in which the corporation has not paid a composition fee.

You will see that for the Wigan $3\frac{3}{4}$ per cent. Mortgage Bonds the foot-note sets out the amount of the bonds with their respective numbers. Thus, numbers 656 to 790 are for £1,000 each, whereas numbers 1075 to 1104 are for £100 each. To big investors the amount (or as it is generally expressed on the Stock Exchange—"shape") of the bonds is frequently of some importance, as it is much less trouble to handle a few large bonds than a number of small ones; in some cases sales of bonds are marked (†) in order to indicate that the price refers to small bonds only.

The note in reference to Southampton $3\frac{1}{2}$ per cent. Redeemable Stock states that the redemption is to be carried out by drawings or purchase, but in *Burdett* you will find that repayment can also be made by agreement with the stockholders.

There are several loans redemption of which can take place only with the consent of the holders. It might happen that, although practically the whole of such an issue was redeemed, yet some obstinate stockholder might persistently refuse repayment, and the corporation would therefore be forced to continue the payment of interest indefinitely. In some other cases, however, as, for example, in Croydon

Corporation $3\frac{1}{2}$ per cent. Stock, there is the right, not only to redeem by agreement with the holders, but also by purchase in the market.

PUBLIC BOARDS, &c.—UNITED KINGDOM.

It is only since 12th May, 1909, that the loans of the various Public Boards have been given under a separate heading in the *Daily List*.

The first group (free of stamp duty) includes the Metropolitan Water Board "B" stock, of which there is nearly £36,000,000; most of this was issued in exchange for the ordinary stocks of the various London water companies recently taken over.

In the second group (subject to stamp duty) you will find the A stock which was issued in exchange for the various irredeemable debenture issues of the London water companies; all the A stock is redeemable in 1963 or after. Following the A stock there are a number of separate debenture stocks still quoted under the names of the various companies; all of these are redeemable under the same conditions as they were originally subject to, viz., at any time after the expiration of 25 years from date of issue. These dates of issue vary, and it will be necessary to refer to some former number of *Burdett* or similar work in order to ascertain when the Water Board authority has the option to redeem. As, however, all the stocks are quoted at a substantial discount the dates at which they can be redeemed at par is of no immediate importance.

In the same way Port of London A and B Stock has been issued in place of various dock shares and stocks which were formerly entered under Canals and Docks, on page 9 of the list.

COLONIAL AND PROVINCIAL GOVERNMENT SECURITIES.

On page 2 the first column is given up to Colonial and Provincial Government Securities, the bonds and stocks being set out in separate sections. I will here take the opportunity of explaining that in all classes of securities from page 2 onwards you will find that the column headed "Business Done" is, for the two days preceding account

day, divided by a straight line drawn down the centre which distinguishes business done for money from business done for the account. You must be careful to recognize that the quotations given for the account refer not to the one just being arranged, but to the following one a fortnight later; business for the current account is considered as for cash.

CORPORATION STOCKS—COLONIAL AND FOREIGN.

The second column on page 2 is devoted to Colonial and Foreign Corporation Stocks. Nearly all the foreign corporation bonds are redeemable by drawings, whereas the colonial issues are generally repaid at a fixed date or dates. Included in this list are a few securities which one might not expect to find, such as harbour boards, drainage boards, waterworks, &c.

When a purchase of bonds is made within a short time of the date at which drawings take place, and where the said bonds are not to be delivered until after such date, it is advisable to insist on the seller stating the numbers. The reason for this precaution is evident, as should the price paid vary materially from the redemption price the seller will have the option of delivering those bonds which are least favourable to the buyer.

FOREIGN STOCKS, BONDS, &c.

The group is divided into two sections according as to whether the coupons are payable in London or abroad. I have already explained the difference between sterling issues and those in which the rates of exchange have to be considered. I have also mentioned that the prices quoted in the case of stocks and bonds payable in any foreign monetary systems refer to some arbitrary amount which is as near as may be equal to £100; thus in the case of American securities it is for \$500, in the case of French it is for Fr. 2,500, and so on.

Occasionally one finds loans on which the rate of interest is to be decreased at some future date, as for example, Swedish 4 per cent. Bonds of 1900, in which the rate is to be reduced after 1910 to $3\frac{1}{2}$ per cent. until the date of repayment. It is of course evident that due attention must be given to this fact in calculating the true rate of interest yielded.

There are a few other general explanations which may be given. Brazilian Railway Guarantees Rescission 4 per cent. Bonds refer to bonds issued by the State of Brazil with a government guarantee, for the purpose of *rescinding* certain previously existing securities.

The difference between internal and external loans is that the former are issued in the country of the borrower and are generally subject to various taxes from which the external loans are free. There are several foot-notes in reference to this group of securities, and great care must be taken to consult these and, whenever necessary, to enquire still further as to any point which does not seem perfectly clear.

HOME RAILWAYS.

We now come to the very important group of securities known as "Home Rails," the first section of which is headed Railways—Ordinary Shares and Stocks. In some cases you will find there is ordinary stock as well as preferred and deferred ordinary. The explanation of this is that it has been found advisable to offer the holders of ordinary stock the option of splitting their holding into deferred and preferred; for example, any holder of £100 of London, Brighton and South Coast Railway Ordinary Stock has the right from the 15th January to the 15th July in any year to divide it into £50 of 6 per cent. preferred ordinary stock and £50 of deferred ordinary stock. By thus splitting his stock he will in no way alter the total amount of dividend receivable, but he can sell his deferred stock and purchase preferred stock in its stead in order to avoid what he may consider an undesirable fluctuation in his annual income; on the other hand he may wish to dispose of the preferred stock. If the dividend payable on the undivided ordinary stock were 3 per cent., then the 6 per cent. preferred stock would be paid in full, while the deferred stock would receive nothing. If, on the other hand, the dividend payable on the undivided ordinary were at the rate of 10 per cent., the preferred ordinary would still only receive 6 per cent., while the deferred ordinary would receive 14 per cent. per annum. The splitting of the ordinary stock is not always conducted in the manner above indicated; for instance, £100 Caledonian Ordinary Stock can be exchanged for £100 preferred and £100 deferred so that the nominal holding is doubled. Similarly with London and

South Western Ordinary Stock. £100 of the original ordinary stock of the Great Northern Railway, however, was exchanged for £75 of 4 per cent. preferred and £50 of deferred. The market value of these divided stocks is generally slightly better than that of the undivided stocks.

In the case of all English Railways the preferred stock is entitled to its preferred charge on the profits of the whole year, whereas in the case of Scotch Railways each half-year must be separately considered. This might make an appreciable difference; for instance, if the London, Brighton paid at the rate of only 1 per cent. per annum on the undivided ordinary and 2 per cent. per annum on the preferred ordinary for the first half-year, then in the second half-year, if the dividend on the undivided ordinary were at the rate of anything up to 5 per cent., the preferred stock would receive double such rate in order, so far as possible, to make up the full 6 per cent. for the year. In similar circumstances with a Scotch railway nothing beyond the stated rate could be paid on the preferred ordinary stock for any half-year.

Railways Leased at Fixed Rentals.—These refer to the various stocks of railways which have been let for long terms to more important companies at fixed rentals, out of which the dividends on the stocks are paid. The only point of any great interest in reference to these stocks is the relation in which they stand to the debenture stocks of the company paying the rental. So long as the company is solvent the two securities may be considered as practically equal, but it is impossible to make any general statement as to what would happen in event of default.

Debenture Stocks.—None of these is subject to redemption. They are not secured by any mortgage, and in the event of default in the interest payments the only remedy is the appointment of a receiver to work the line in the interests of the debenture stockholders; there is no power of sale. The order in which the various debenture issues are set out does not indicate their order of precedence; for instance, in the case of the Great Western Railway Company it will be found that all five issues rank *pari passu* for interest. On the other hand, the Great Central Railway 5 per cent. and $4\frac{1}{2}$ per cent. Debenture Stocks rank equally, and the $3\frac{1}{2}$ per cent. Debenture Stock, which is referred to as *Second Debenture Stock*, ranks not only after the two mentioned but also after another

smaller unquoted issue. Again, you will notice that there are several cases in which the various issues of Debenture Stock are referred to as A, B, C and D, to indicate their order of priority. I must also explain that where the words "Leased by" occur, the security of the issue is somewhat different. Thus, in the case of the London and Blackwall Railway there has been a lease to the Great Eastern Railway Company for 999 years, at a net rental which is applied in payment of the interest on the Ordinary Stock, whilst the liability with regard to the Debenture Stock (as also the Preference Stock) has been taken over by the Great Eastern. In some other leased lines you will find that the interest on the Debenture Stock is a first charge on the fixed rental, as, for example, in the London and Greenwich Railway. You will notice that after the three issues of Metropolitan District Debenture Stock there is the 4 per cent. Prior Lien Debenture Stock. This was issued under the authority of an Act of Parliament, and ranks in priority to all the debenture stocks. It may be redeemed at any time after 1920 at the rate of 105 per cent. It is only in cases of extreme necessity, where it is impossible to raise the required money on anything like practicable terms, that Parliament sanctions the creation of such stock as this ranking in front of existing debenture stocks.

Guaranteed Shares and Stocks.—Broadly speaking, these may be considered as ranking next after the Debenture Stocks. The interest in all cases is cumulative, that is to say, if for any reason there should be a default in the payment, the amount so unpaid would remain as an undischarged liability payable in the future.

Preference Shares and Stocks.—The payment of dividends on these stocks is contingent on the profits of each separate year (or half year in the case of Scotch Railway Companies), that is to say, they are never cumulative as they are in the previous group. Preference stocks rank for dividend subsequent to the guaranteed stocks and prior to the preferred ordinary where such exist. As a general rule the order of the stocks indicate the relative position as regards priority, but this is not always so, for instance, the first four preference issues of the South-Eastern rank *pari passu*. There are several cases of convertible preference stocks the nature of which I have already alluded to.*

* See page 218.

INDIAN RAILWAYS.

Although this is a comparatively small group, yet a considerable amount of careful study is necessary before the exact nature of the securities can be properly understood.

The first quoted stock is Assam Bengal Railway Company, Limited, Guaranteed 3 per cent. Capital Stock. Here a minimum dividend of 3 per cent. is guaranteed by the Secretary of State for India, together with a certain portion of surplus profits, until such time as the Government shall exercise its option to purchase the undertaking, when the capital stock is repayable *at par in sterling in London*. I have marked the last few words in italics in order to impress upon you how important they are. There have been several cases where the Government, having somewhat similar options to purchase railway undertakings, have exercised their right, and upon legal investigation of the contract it has been found that the stockholders were obliged to accept securities worth much less than the market value of their stock. In this case there is no possibility of any misunderstanding, repayment is to be at par in sterling in London on 31st December, 1921, or on the 31st December of any succeeding tenth year. There is, of course, a very great difference between a stock repayable at the option of the Indian Government, such as the above, and one payable definitely on a fixed date like the Great Indian Peninsula Railway 3 per cent. Guaranteed Stock, which is quoted at about 91 and is repayable at par in 1925.

The various annuities quoted are those which have been granted by the Government in part payment for lines which they have exercised their option to purchase. Thus, the East Indian Railway A Annuity is a terminable annuity of £1 payable half-yearly until 1953. All the A Annuities are similar, except that the term of years differs and there is a slight difference in the fractional amount deducted for management expenses, &c. In order to show more clearly the exact nature of these investments let it be supposed that on the 30th April, 1909, 20 Great Indian Peninsula Railway £1 A Annuities were purchased at £19¼ each. The following is the manner in which such an investment should be analyzed.

Great Indian Peninsula Railway A Annuity quoted in the Official List on April 30th, 1909, at 19-19½. If business can be done at 19¼ (the middle price) then the cost of purchasing 20 such annuities of £1 per annum will be				£385	0	0
Stamp Duty on Transfer	.	.	.	2	0	0
Brokerage Commission	.	.	.	1	18	6
Contract Stamp	.	.	.	0	1	0
Total Cost	.	.	.	£388	19	6
Deduct accrued annuity from 1st January to 30th April—119 days				6	5	6
Net Purchase Price	.	.	.	£382	14	0
Net Price per £1 Annuity	.	.	.	£19	2	8

From each £1 annuity a deduction of 1·26*d.* is made on account of management expenses, leaving the net amount payable 19*s.* 10·74*d.* £19·133 therefore represents the present value of an annuity of ·99475 for $39\frac{7}{4}$ years (the contract terminates on 17th August, 1948) payable half-yearly.

Ignoring the question of income tax the yield is easily calculated by means of a well-known formula at £4. 3*s.* 6*d.* per cent., which rate however it must be distinctly understood refers to a decreasing investment, since every year a portion of the purchase price will be included in the annuity, and in 1948 the whole of our ledger value will have been wiped out. The yield here shown is before deduction of income tax. At one time income tax was charged on the whole annuity, but it is now calculated on the interest portion only; such calculation, however, is made on the basis of the original rate at which the annuity was calculated, viz., £2. 17*s.* 0*d.* per cent., and with the initial capital value as £26. 2*s.* 0*d.* for an annuity terminating in $48\frac{48}{365}$ years payable half-yearly, *i.e.*,

$$26\cdot1 = \frac{1}{2} \left\{ \frac{1 - \left(\frac{1}{1\cdot01425} \right)^{96\frac{96}{365}}}{\cdot01425} \right\}$$

As I have shown above a purchase now at a net price of £19. 2*s.* 8*d.* yields much more than £2. 17*s.* per cent., and

when calculating the necessary sinking fund for office purposes at the end of the year, it will be found that the amount of interest included in the annuity is much larger than shown in a calculation based on a rate of £2. 17s. per cent., and consequently the amount of income tax deducted is actually too small.

When large investments are made in these A annuities it is convenient to keep a table such as that shown on page 237, by means of which it is easy to see at a glance whether the prices at which such annuities are offered are sufficiently attractive.

The figures given here are not guaranteed to be absolutely correct, as there are several matters with regard to which approximation has been found expedient in order to save unnecessary labour, but the results are quite good enough for practical purposes. Thus, for example, if on 13th January, 1910, an offer is made of Great Indian Peninsula Railway "A" Annuity at £19, and of Scinde, Punjaub and Delhi Railway "A" Annuity at £20½, it can readily be seen which gives the greater yield. In approximating for dates between those given, care must be taken to notice the decrease of yield shown on the payment dates, thus, Great Indian Peninsula "A" Annuity is payable 1st January and 1st July, and the approximate yields at a price of £19 for dates between 1st April and 11th June (when it is first marked *a.d.*) will all be greater than that shown for 1st April, although at first sight one might have expected the rate to lie somewhere between that shown for 1st April and 1st July. The figures given are before deduction of income tax, but would be subject to some very slight alteration in the event of any change in the rate of tax, owing to the fact that any accrued annuity deducted from the purchase price is, as regards the interest portion of it, charged with income tax, although, as already explained, it is from the purchaser's point of view merely a return of capital.

All the "B" annuities are subject to a deduction for sinking fund intended to be sufficient to repay the original nominal value of the annuity.* Thus, with the East Indian Railway "B" annuity each half-yearly payment of 10s. is subject to a

* In the absence of a more convenient expression I have here referred to the amount of the agreed purchase price paid by the Government represented by each £1 annuity as the "nominal value of the annuity."

INDIAN RAILWAYS. "A" Annuities.

DESCRIPTION.	Price.	Yield as at 1 October, 1909.	Yield as at 1 January, 1910.	Yield as at 1 April, 1910.	Yield as at 1 July, 1910.
EASTERN BENGAL—					
Total amount of Annuity, £41,194.	19	£ s. d. 4 12 10	£ s. d. 4 14 4	£ s. d. 4 12 6	£ s. d. 4 13 10
Date of Termination, 30 July, 1957.	19½	4 9 6	4 10 11	4 9 1	4 10 6
Dates of Payment, 1 April, 1 October.	20	4 6 4	4 7 7	4 5 10	4 7 2
Management Expenses per £1 annuity, 3·787d.	20½	4 3 3	4 4 5	4 2 11	4 4 0
	21	4 0 3	4 1 5	3 19 10	4 1 0
EAST INDIAN—					
Total Amount of Annuity, £111,069.	19	4 10 5	4 11 11	4 9 11	4 11 4
Date of Termination, 14 February, 1953.	19½	4 6 11	4 8 3	4 6 5	4 7 9
Dates of Payment, 1 April, 1 October.	20	4 3 7	4 4 10	4 3 1	4 4 4
Management Expenses per £1 annuity, 1d.	20½	4 0 4	4 1 7	3 19 10	4 1 0
	21	3 17 3	3 18 5	3 16 8	3 17 10
GREAT INDIAN PENINSULA—					
Total Amount of Annuity, £242,847.	18	4 14 7	4 12 3	4 13 10	4 11 6
Date of Termination, 17 August, 1948.	18½	4 10 6	4 8 3	4 9 9	4 7 6
Dates of Payment, 1 January, 1 July.	19	4 6 7	4 4 5	4 5 10	4 3 8
Management Expenses per £1 annuity 1·26d.	19½	4 2 10	4 0 9	4 2 1	4 0 0
	20	3 19 3	3 17 2	3 18 6	3 16 5
MADRAS—					
Total Amount of Annuity, £73,329.	19	4 13 2	4 14 8	4 12 9	4 14 3
Date of Termination, 1 April, 1956.	19½	4 9 10	4 11 3	4 9 4	4 10 10
Dates of Payment, 1 April, 1 October.	20	4 6 7	4 7 11	4 6 1	4 7 6
Management Expenses per £1 annuity, 1·2d.	20½	4 3 5	4 4 8	4 0 11	4 4 3
	21	4 0 5	4 1 7	3 19 11	4 1 2
SCINDE, PUNJAUB, AND DELHI—					
Total Amount of Annuity, £71,097.	19	4 16 2	4 14 5	4 15 10	4 14 1
Date of Termination, 31 December, 1958.	19½	4 12 10	4 11 1	4 12 6	4 10 9
Dates of Payment, 1 January, 1 July.	20	4 9 7	4 7 11	4 9 3	4 7 6
Management Expenses per £1 annuity, 2·483d.	20½	4 6 6	4 4 10	4 6 1	4 4 5
	21	4 3 6	4 1 11	4 3 1	4 1 6

The above are the "effective yields," that is to say, due effect has been given to the fact that the annuity payments are made half-yearly.

deduction of 8*d.* for sinking fund, in addition to the deduction for income tax and management expenses. These half-yearly deductions for sinking fund were commenced in 1880, and were so calculated that if invested to yield $3\frac{1}{2}$ per cent. interest per annum, at the termination of the annuity in 1953 they will have accumulated to £22. 5*s.* There is no guarantee as to the amount which will be returned to annuitants in 1953; in this case it is fairly certain that an average rate of $3\frac{1}{2}$ per cent.* will not be obtained on the sinking fund investments, and, therefore, something less than £22. 5*s.* must be anticipated. If an average of 3 per cent. be obtained the amount to be received in 1953 will be approximately £17½. When purchasing "B" annuities it is always necessary to make arrangements by means of sinking funds for the difference between the net price paid and the amount expected to be received at the expiration of the annuity term. Thus, in this case, if we base our calculations on an expected payment of £17½ in 1953, we shall have to set aside a sinking fund to provide the difference between £17½ and the purchase price, that is, about £21, which, of course, will considerably decrease the yield on the investment. On the other hand, the Great Indian Peninsula "B" Annuities can be purchased at about £20½, and the sinking fund deductions are sufficient to provide £26. 2*s.* in 1948, if accumulated at only $2\frac{1}{2}$ per cent. If the same average rate is obtained as that assumed for the East Indian Railway sinking funds, viz., 3 per cent., the amount to be received in 1948 will be about £30, which is nearly 50 per cent. above the present market price, and consequently it would be permissible to write up the ledger value to that amount by means of yearly additions calculated as negative sinking fund instalments.† The result in this case is to increase considerably the yield on the investment.

The C Annuities of the East Indian Railway are somewhat similar to the B, but the sinking fund was not commenced until 1st October, 1892, and the rate of interest assumed was apparently about $3\frac{1}{4}$ per cent. instead of $3\frac{1}{2}$ per cent., and consequently the sinking fund deduction

* It must be pointed out that as income tax has to be paid it would be necessary to obtain an average rate of over £3. 13*s.* 6*d.* per cent. (with 1*s.* income tax) in order to result in a net cumulative rate of $3\frac{1}{2}$ per cent.

† See page 174 as to Negative Sinking Funds.

is 2s. 6d. per annum instead of 1s. 4d. per annum. It is allowable for holders of A annuities to have them converted into C annuities at any time on payment of arrears of sinking fund instalments accumulated at compound interest. Such accumulated amount at the present time is, I believe, about $2\frac{3}{4}$, which is somewhat less than the difference in the market prices of the A and C annuities, so that presumably there would be a small profit to be made on the transaction if A annuities were purchased and sold after conversion as C annuities. I may, however, point out that there is a very limited market in the annuities, and such a purchase and sale as I have described would not often be possible.

As already mentioned the nominal value of the £1 East Indian Annuity is $22\frac{1}{4}$, so that £4 10s. of annuity represented nominally £100 capital, and you will notice that there is quoted in the *List Deferred Annuity Capital* upon which a dividend of £4 per annum is guaranteed, and in place of the 10s. given up the holder is entitled to a share in the profits, which in the past have varied from over £3 per annum to £1. 5s. per annum.* The price of this stock is (30th April, 1909) 105 per cent., and at first sight it would seem to show a high yield, but it must be noticed that in any case by 1953 all interest will cease and no capital will be repaid. The contract in reference to the Deferred Capital Stock terminates in 1930, when it will be exchanged for A annuities at the rate of £4. 10s. per cent.; moreover, it is allowable for either the Government or the Deferred Annuitants, by giving two years' notice, to terminate the contract on either the 1st January, 1920, or the 1st January, 1925. Thus it is evident that any holder of this deferred annuity capital must be careful to arrange for the necessary sinking fund. At the same time that the class C annuities were started, another class D was also arranged for the benefit of deferred annuity capital holders who did not wish to be subjected to the trouble of arranging their own sinking fund. This stock, has only £3. 8s. 9d. instead of 4 per cent. guaranteed, the remaining 11s. 3d. (being at the rate of 2s. 6d. for each £22 $\frac{1}{4}$)

* When the Indian Government purchases a railway it usually finds it convenient to arrange for its future management to remain in the hands of the existing directorate. For this purpose a small proportion of the profits is allowed to be paid as dividend on a reduced capital. Without some direct interests in the fortune of the company there would be but little incentive to trouble as to the successful and remunerative working of the line.

is invested in the same way as the C annuity sinking fund; otherwise the payment of surplus profits is exactly the same as in the case of the Deferred Annuity Capital. If the contract is not terminated at either of the two dates above mentioned the holders will receive in 1953 whatever sum the sinking fund has accumulated to, but there is no guarantee that such sum shall be £100. If the contract is terminated at either of the two dates, then from that time forward each £100 of stock will be represented by £4. 10s. of class C annuities.

In the case of the guaranteed capital stocks it is always advisable to consider the date at which the Government may have the option to purchase and also the form of payment; for example, Indian Midland 4 per cent. Guaranteed Stock might appear a desirable investment until it was recognized that it will almost certainly be repaid at par at 31st December, 1910. On the other hand the Delhi Umballa Kalka Railway Company 3½ per cent. Guaranteed Stock, although not repayable before 31st December, 1936, does not possess the advantage of having a fixed price for repayment. The Government can purchase the line by paying a sum equivalent to 25 times 50 per cent. of the average yearly gross earnings of the railway during the five years immediately preceding. It is, of course, quite impossible to forecast what price this condition will result in.

A curious fact in reference to guaranteed capital stocks of Indian railways is, that by the Trustee Act, 1893, they are apparently all constituted trustee investments, although, in some cases, a large proportion of the dividend now payable is contingent on surplus profits, as for instance, the Burma Railways Guaranteed Stock, where only 2½ per cent. is guaranteed by the Government, so that although it is repayable at par in either 1928, 1935 or 1941, there is a considerable element of speculation involved which does not appear to be a desirable characteristic for trustee investments.

RAILWAYS—BRITISH POSSESSIONS.

This group is divided into two sections, the latter of which consists of companies whose properties are situated in other than British territory, but have been leased to British companies.

Many of the bonds here quoted are guaranteed, and it is important to notice the exact nature of such guarantee. In some cases the guarantee is given by the Government, in others by the Province or by some other railway company.

You will see in this group, *Beira Railway Income Debenture Stock* and *Quebec Central Income Bonds*. The meaning of this description is that the payment of interest is dependent merely upon the available profits of each year, that is to say, the interest is not secured by any fixed charge, and no foreclosure proceedings can be instituted in case of non-payment. In both cases the *capital* is secured by mortgage. There are, however, several kinds of income bonds, such as cumulative income bonds, where the interest, if unpaid, is allowed to accumulate, and all such accrued interest must be paid up before the current interest is paid. Bonds often referred to as "Convertible Incomes" are those convertible into securities of some other class, such as preferred stock.

AMERICAN RAILROAD STOCKS AND SHARES.

There are a great variety of these stocks and shares, and I do not think it would serve any useful purpose to discuss them at length. The common stocks of American railroads are analogous to the ordinary stocks of English railways, and the dividends payable to English holders are generally remitted in dollar drafts, which it is necessary to negotiate at the current rate of exchange, or else they are received by attorney on the other side and the amounts sent to an agent on this side who converts them from the United States currency to English sterling. In the case of a private holder who wishes the dividends as they become due to be paid to his bankers, it is necessary for them to have his signature witnessed by a notary public, except in a few instances where a banker's guarantee as to the signature is accepted.

The following are the requirements of American Railroad Companies as to the endorsement of Certificates in the names of corporations or limited companies :

A copy of the Resolution of the Board of Directors, authorizing the sale and transfer of that particular Certificate and quoting the number of it. Appended to this (on the same sheet of paper), there must be a Statement, taken from the Articles

of Association, that any two Directors and the Secretary (or other officials, as the case may be) are authorized to sign and seal the transfer of such Shares.

The paper on which this copy of Resolution and Statement are written, must itself bear the Seal of the Company, accompanied by the signatures of those officials who are authorized to sign beside the seal.

To make the Shares a good delivery on the Stock Exchange a copy of this Resolution and Statement must be attached to every Certificate of Shares.

There are, however, three exceptions, namely,

1. The Pennsylvania Railroad Company, which has made arrangements with the London Joint Stock Bank to post dividends to all English stockholders in warrants payable in sterling at a rate which varies from about 4s. 1d. to 4s. 1½d. per dollar.
2. The New York Central and Hudson River Railroad Company, which has made a similar arrangement with Messrs. J. S. Morgan and Company, who pay all warrants in sterling at the fixed rate of 4s. 1½d. per dollar.
3. The Illinois Central Railroad Company, which has made a similar arrangement with the Bank of England, who pay all warrants in sterling at the current rate of exchange.

It may also be mentioned that in case of sales of common stock by English holders there is occasionally some difficulty when such holder is a public company, as it is necessary to go through somewhat the same formalities as are required when selling inscribed stock, but with much greater inconvenience owing to the railway company being situated in America.

There are some banks and arbitrage dealers who advise purchasers of common stocks to avoid difficulty by allowing the registration to be made in the name of such bank or arbitrage dealer, generally referred to as "good names." It is somewhat doubtful, however, whether this arrangement results in advantage. Every time a dividend is due the share certificates must be taken to the registered holder, who stamps them with a notice as to the payment

of dividend, and after some delay pays the amount due. In certain cases (especially when the holding is a small one) payment is made at the fixed rate of exchange of 4s. 0½d. per dollar, which, of course, is very low. Another method adopted by many English holders of American shares in order to avoid the difficulties referred to above, is to have their shares registered in the name of the "English Association of American Bond and Share Holders, Ltd." This association charges only a small fee for such registration, and will either hand over the shares endorsed to Bearer and ready for delivery on the Stock Exchange, or will issue Certificates to Bearer countersigned by the London, County & Westminster Bank, Ltd., against the deposit of the shares. The Certificates have sheets of coupons attached, in order to facilitate the collection of dividends, especially for residents in the country, who have only to pass the coupons through their Bankers or Agents for encashment as the dividends fall due.

In England there is little doubt that most purchases of American Railway Common Stocks are made by speculators, to whom the method of payment of the dividends is comparatively of little importance.

AMERICAN RAILROAD BONDS—CURRENCY—GOLD—STERLING.

I have already explained, in Lecture IX., the difference between these three classes of bonds, and I shall, therefore, merely add such general information as may seem advisable. To give any detailed information as to the nature of the security of the numerous bond issues would be beyond the scope of these lectures, but I think it will be advisable in the first place to explain that most of these bonds are secured by mortgage of some separate section of the line in question, and it is often exceedingly difficult to trace out exactly what these mortgages are and how they rank. One issue may be secured by an absolute first mortgage on one part of the line and by a second or third charge on another. An extremely valuable book for obtaining this information is White and Kemble's *Atlas and Digest of Railroad Mortgages*, which, by means of various coloured lines, shows the exact portion of the system affected by different mortgages. It is not at all unusual to find the same section marked with four or more different colours, each of which indicates a separate mortgage.

Another difficulty in examining these securities arises out of the manner in which various amalgamations, &c., have been effected. You will often find that one company is controlled by another by means of stock ownership, that is to say, the one company owns a sufficient amount of stock to enable it to have a controlling vote, and so be in a position to make whatever working arrangements it may think advantageous to its own interests.

Sometimes the company possessing the controlling interest is not itself a railroad company, but has been formed merely with the object of gaining such controlling interest of certain important lines.

Further complications are introduced by the fact that a company, which itself has a controlling interest of some other company or companies, may in turn be itself controlled by another company. In many cases the common stock purchased for the purpose of gaining the control of a line is deposited with trustees as collateral security for a bond issue, the proceeds of which may perhaps be applied towards meeting the expense of the purchase of such stock. These bond issues generally include in their descriptive titles the word collateral, but where there is also some other security the nomenclature often becomes somewhat lengthy, as, for example, "Northern Pacific—Great Northern 4 per cent. "Joint Bonds—Chicago, Burlington and Quincy Collateral "Coupon, 1921." The description of these bonds as given in Poor's Manual is as follows:—

Issued for the purpose for acquiring the capital stock of the Chicago, Burlington and Quincy Railroad Company at the price of 200 dollars per share, and secured by deposit of the shares acquired, \$107,613,000, as of June 30th, 1908. The stock thus deposited is owned, one-half by the Northern Pacific Railway Company, and one-half by the Great Northern Railway Company, and the obligation on account of the bonds is apportioned in like manner between the issuing companies, each one-half. In the event of either company defaulting in its obligations, the company not in default becomes the sole owner of the deposited shares, and assumes the entire liability on account of the bonds. Trustee: Standard Trust Company New York, N.Y.

It often happens that several issues of bonds are secured by first mortgages on portions of the line which are exceedingly valuable, and it is considered that one very large issue secured as a first charge on the whole system would prove much more attractive to the public and consequently could be placed on more advantageous terms. The bond holders who are so amply secured by their charges on separate sections may not be willing to agree to any exchange, and in such a case the company may take powers for a large issue secured by a first mortgage on the whole system, but subject to the existing mortgages against which a portion of the issue is reserved for the purpose of repaying the bonds as they fall due. Such an issue as this is often referred to as a First Mortgage Refunding Loan; an example of this nature is "Long Island Rail Road Guaranteed 4 per cent. Refunding Mortgage Gold Bonds." These bonds are secured upon all the property, rights, and franchises of the company. The amount of the bonds authorized was \$45,000,000, of which about \$18,000,000 were to be issued from time to time as needed for the general purposes of the company, subject to the restrictions of the mortgage deed. The remainder of about \$27,000,000 was to be reserved for the retirement of outstanding bonds.

Sometimes bonds are issued on the security of an important railway terminus. There is usually a guarantee given by the companies using the terminus, and it is necessary to notice whether such guarantees are joint and several, or merely a fixed guarantee by each company as to its own proportion. As examples, I may mention the New Orleans Terminal Company First Mortgage 50-year Gold Bonds, which are guaranteed jointly and severally by the Southern Railway and the St. Louis and San Francisco Railroad Company; on the other hand the Terminal Railroad Association of St. Louis General Mortgage Refunding 4 per cent. 50-year Gold Bonds are secured by means of rentals payable by 14 different companies in perpetuity. A failure of any company to meet its share of the rental will result in its exclusion from the use of the property.

Some other types of bonds met with are as follows:

Consolidated Mortgage Bonds.—These are generally created as a result of some readjustments of finances. A

large issue may be authorized of which a sufficient amount will be held in reserve to retire the various prior divisional mortgages as they fall due in the same manner as explained above in the case of refunding loans. A good example of this class of bond are the First Consolidated 5 per cent. Bonds of the Southern Railway Company.

Divisional Bonds.—These are merely bonds secured on some specific division of the property.

Assumed Bonds are very similar to guaranteed bonds, but the controlling company in this case, not only guarantees the payment of principal and interest, but assumes all responsibility therefor, that is to say, it places itself in the position of the original borrower.

Sinking Fund Bonds.—There are many kinds of these bonds, but their essential feature is a provision for setting aside each year either a fixed or varying amount to be applied in some prescribed form or forms to the repayment of the capital.

Extended Bonds.—These are bonds which, although matured, have been allowed by agreement to continue for some further period.

Underlying Bonds are those which rank prior in mortgage security to some subsequent issue. They need not, however, be secured by way of a first mortgage, but may themselves be subject, or junior to, some other issue.

Prior Lien Bonds.—This description is used in a somewhat different manner in reference to American Railroad Bonds to that explained under Home Railway Debenture Stocks. It will generally be found that there is some other issue secured by a general lien, and that the prior lien issue is so described in order to indicate its priority to such general lien.

Participating Bonds.—These are bonds on which a fixed rate of interest is payable, and in addition, under certain conditions, they are entitled to a participation in profits.

Equipment Bonds are issued for the purpose of raising money for equipment, such as locomotives, cars, &c., upon which they are directly secured. They are often, amply secured, and generally bear a comparatively high rate of interest, but the term is usually short, which is a disadvantage to many large investors; owing to the nature of the security it is an advisable provision, however.

FOREIGN RAILWAYS.

I think I have now explained so many of the terms used that most of the expressions appearing in this group will be fairly easily understood, although, of course, you will find it absolutely necessary to turn up some book of reference for further particulars. In most cases of Foreign and American Railway Bonds the numbers are given with the amounts for which the bonds are issued, but occasionally the details are too lengthy for publication in the *List*, and a footnote explains that the information can be obtained from the Share and Loan Department of the Stock Exchange. Thus, in the *List* for the 30th April, 1909, I find such a note in reference to the Guayaquil and Quito Railway 6 per cent. First Mortgage Gold Bonds of \$1,000 each (special series).

BANKS AND DISCOUNT HOUSES.

An important point to notice with bank shares or stock is the amount of outstanding liability. For example, the £60 shares of the London City and Midland Bank have only £12. 10s. paid up, and by reference to *Burdett* you will find that the further liability per share is, callable, £12. 10s.; reserved, £35. The meaning of this is, that £12. 10s. can be called up at any time, but the remaining £35 only in event of liquidation. This arrangement is made possible by Section 5 of the Companies Act, 1879, which provides that: "A limited company may by a special resolution declare that any portion of its capital which has not been already called up shall not be capable of being called up, except in the event of and for the purpose of the company being wound up; and thereupon such portion of capital shall not be capable of being called up, except in the event of and for the purposes of the company being wound up."

I must point out that a seller of shares with a liability attaching to them, is not definitely released from such liability until one year after the sale, and it is therefore advisable to see that the transfers in respect to same are not held over unduly. When bank shares are sold, it is usual for the numbers of such shares to be required in order that they may be stated in the contract note. This is in conformity with Leeman's Act, which avoids a contract for the sale of bank shares unless their numbers are specified, or the name of the

registered proprietor is given. The apparent object of this Act was to prevent speculation by means of bear sales. Although probably this Act, when first passed, met a recognized need, there is, I think, at the present time, but little necessity for any provisions such as those contained in the Act, to prevent speculation in bank shares, and the Stock Exchange enforces among its members, under pain of expulsion, agreements made in breach of Leeman's Act.

The present state of the law is indicated by the following two cases:—In the case of *Seymour v. Bridge* (1885, 14 Q.B.D. 460, it was held that as the purchaser (Bridge) knew of the Stock Exchange rule referred to above he could not repudiate his contract on the ground that it was contrary to Leeman's Act. On the other hand, in the case of *Perry v. Barnett* (1885), 15 Q.B.D. 388, the investor did not know of the rule, and it was therefore held that he was not bound to pay for the shares.

The remaining groups of securities in the *List* it is unnecessary to consider separately, but there are a few explanations in reference thereto which may be useful.

Founders' Shares.—These are in effect deferred shares not entitled to receive any dividend until the ordinary shares have received some agreed rate, after which the total surplus is divided in some fixed proportion. If the company is highly profitable it will generally happen that the founders' shares will receive very big dividends. They are not so popular now as they were some few years ago, and are generally found among companies of a somewhat speculative nature, such as mining companies, &c. On page 13 of the *Daily List* you will see a foot-note referring to the various companies which have issued founders' shares. The Companies Act, 1900, provides that every prospectus must state the number of founders' or management shares, if any, and the manner in which they are to share in the profits.

Vendors' Shares.—These are shares taken by the vendor of an undertaking at the time of its sale to a limited company, in payment or part payment. His acceptance of this kind of payment instead of cash is, of course, supposed to indicate his confidence in the success of the undertaking. Sometimes there is a proviso that none of the vendors' shares shall be sold until an agreed period has elapsed.

These shares are frequently sold through outside brokers who deliver them to their clients as ordinary shares, notwithstanding the fact that they may be worth considerably less. On the Stock Exchange, Vendors' shares are bad delivery when the agreed purchase was for Ordinary shares, and they cannot be dealt in at the special settlement. It is therefore important if a purchase should at any time be made from an outside broker to first ascertain the numbers.

Bonus Shares.—It often happens that subscribers for debentures are offered a number of fully paid shares as an extra inducement; such shares are termed bonus shares. They are generally those which have been held by the vendors, but occasionally they are offered as a commission, which, if duly set out in the prospectus, is permissible. As, however, the Companies Act of 1900 expressly forbids the issue of shares at a discount, it would be illegal for a company to issue bonus shares in such a manner as would be equivalent to an issue at a discount. I may, however, mention that there have been several issues where a discount was provided for by the somewhat doubtful means of returning a portion of the subscription money as a commission allowed to all subscribers.

Cumulative Preference shares are those in which the dividends are payable out of the profits of the company before the ordinary shares receive anything, and if in any one year there should not be sufficient to pay the interest the deficiency is to be made up in subsequent years. If it is expressly stated that the preferential dividend is to be paid out of the profits of *each year*, then the shares are said to be *non-cumulative*.

Cumulative Ordinary Shares (such as those of the Dunlop Pneumatic Tyre Company Limited) are entitled to a certain maximum rate of dividend in priority to the deferred shares; and if in any particular year the profits do not warrant this rate being paid, the deficiency can be made up before any declaration is made on the deferred shares.

Participating Preference Shares.—An example of these is the Anglo-Persian Oil Company Ltd. Cumulative 6 per cent. Participating Preference Shares, which are entitled to a preferential and cumulative dividend at the rate of 6 per cent. per annum and a further non-cumulative dividend at the rate of 2 per cent. per annum after the ordinary

shares have received a payment of 6 per cent. per annum.

Under the heading of "Financial, Land, and Investment" you will find two investments which might have been included with Foreign Government Securities, since they are absolutely guaranteed by foreign Governments, viz., Egyptian Government 4 per cent. Irrigation Trust Certificates and Caja de Prestamos Para Obras de Irrigacion y Fomento de la Agricultura 35-year 4½ per cent. Sg. Fund Gold Bonds of Mexico.

The nature of the business undertaken by some companies is such that a return of share capital is considered advisable. Thus the Hudson's Bay Company is gradually selling its landed property, and at various dates has returned portions of its capital. (See *Burdett*).

I have already called your attention to several books of reference which are in everyday use, such as the *Stock Exchange Official Intelligence*, the *Stock Exchange Year Book*, the *Investors' Monthly Manual*, and the *Commercial and Financial Chronicle*. In addition to these I may mention *Poor's Manual*, which is indispensable for looking up the main particulars of various American Railway Bond issues; *Moody's Manual*, and the *Manual of Statistics Stock Exchange Hand Book*, are somewhat similar productions, and in some cases will be found to contain additional information. The *Commercial and Financial Review*, compiled by Mr. W. R. Houston, is very useful for the particulars it gives of various Canadian investments.

When considering the advisability of any investment it is always of the utmost importance to examine the past record of prices, and for this purpose I have found it exceedingly useful to have charts prepared of all the stocks and shares already held. Cross ruled sheets of paper are prepared for this purpose, with the scale of prices marked down the side and the dates set out along the top. The middle market prices are filled in for intervals of two or three days by means of a red ink line which indicates at a glance how the price has varied throughout the year. Every time a purchase is made it is marked in at the correct date with the price, so that it is easy to see at any time whether

one's purchases have been carefully chosen, or whether unfortunately, in some cases stock has been purchased at a relatively high price. On the back of the sheet notes are filled in with reference to any event likely to affect the price of the security, as, for example, the particulars of new issues, &c., &c.

Such books as *Mathieson's Ten Year Record* are also very useful for seeing how the prices of Stock Exchange securities have varied in the past.

I have explained in a previous lecture the necessity for deducting all interest that may have accrued in the price at the date of purchase. There is one point, however, to be noticed, and that is in the case where an investment is made at such a time that no payment of interest is received in the same financial year. For example, a purchase of £100 Metropolitan Water Board "B" Stock on the 1st December would include three months' accrued interest, but none would be received until the following 1st March, when an instalment for six months would be due. If the office accounts are made up at the 31st December it would be incorrect to debit the income account with the $\frac{3}{4}$ per cent. in the year about to close, as no interest would then have been received, and the deduction from capital value must therefore be made in the following year. For this purpose it is advisable to have two columns in the accrued interest register, one for those cases where an instalment of interest has been received and the other for cases where it has not, and the amounts in the latter column are carried forward each year to be dealt with subsequently. The following is an example:

NAME OF STOCK.	Amount purchased.	Purchase Price.	Dividend received in the year.	Dividend receivable in succeeding year.	Net purchase price.

A very large investor, such as an insurance company, is bound to have included among its assets a great number of terminable Stock Exchange securities, and it is generally convenient to keep a register for the purpose of calculating the necessary sinking funds. The form of this register may vary considerably, but probably the columns would be headed somewhat as follows :

1. Full title of security.
2. Date of repayment.
3. Nominal amount of security held.
4. Ledger value at 1st January.
5. Sinking Fund reduction of Ledger Value.
6. Sinking Fund addition to Ledger Value.
7. Ledger value at 31st December.
8. Initials of officials, &c.
9. Remarks.

I have already mentioned several examples of terminable securities purchased at prices differing from their redemption price. The true rate of interest can, of course, be calculated in each individual case by Makeham's well-known formula, and the sinking fund arranged accordingly, but this involves a large amount of labour with very little practical advantage over that which would be obtained by calculating all the sinking funds at the same average rate of interest. I must here explain that when we speak of sinking funds it is not usual to actually set aside a separate fund; the instalments are calculated each year and the necessary adjustment made to each ledger value. If a stock is purchased at a discount it will be written up each year by means of the sinking fund instalment, and if on the other hand it is bought at a premium it will be written down each year. In the former case, where the ledger values are gradually increased, it is usual to refer to the annual amounts as *negative* sinking fund instalments.

When one average rate of interest is used as above suggested, it is advisable to choose such a rate as will result in a somewhat more stringent treatment than would be shown by taking true rates for every individual investment. Let us suppose that such a rate is $3\frac{1}{2}$ per cent. If the average true rate obtained on all Stock Exchange securities is over $3\frac{1}{2}$ per cent., and the majority of the securities held stand in the ledgers at a premium, then it is obvious that the method is sufficiently stringent, as the amounts

periodically written off would be greater than would have been shown by calculations based on the true rate of interest. On the other hand, where securities are standing at a discount the sinking fund will be applied in the opposite direction, namely to writing up the ledger values, and so far as these are concerned the employment of a comparatively low rate of interest will result in a somewhat too rapid rate of increase, because such sinking fund instalments will be too large. The settlement of the rate of interest to be used is a practical point for the actuary, who will readily be able to decide as to what is most suitable.

In cases where there is any doubt as to the date of repayment it is usual to calculate the sinking fund instalments in such a manner as will result in the smallest ledger value. For example, if a certain inscribed stock is standing in the ledgers at 102 per cent., and is redeemable at par at any time between 1920 and 1940, then the date to assume is 1920; but if the stock were standing at 98 per cent. then the date to assume would be 1940. I have already referred to this point in my ninth lecture.

The Remarks column will be necessary for explanations as to the manner of repayment and the method of calculating the sinking fund. Thus, some note will be necessary in reference to—

- (a) Bonds repayable by annual drawings, either of fixed or increasing amounts.
- (b) Where borrowers have option of purchasing bonds in the open market instead of repaying at par.
- (c) B annuities of Indian railways, where probable repayment at the end of the contract period may be expected to differ from the purchase price.
- (d) Particular cases, such as shares of the Suez Canal Company.

It will be found that difficulties are constantly arising as to the best method by which to calculate the sinking fund instalments, but in most cases some fairly simple and practical approximation will be possible.

Fractional periods may generally be disregarded, the nearest integral number of years being taken. For example, a 5 per cent. bond purchased at 110 and repayable at par in 36 years and 9 months can be treated as repayable in 37

years, but in some cases, such as Indian Railway A Annuities, somewhat closer approximations should be made.

It will generally be found most desirable to make entirely fresh entries in the sinking fund book each year. New purchases can be conveniently dealt with by entering them under a separate heading for a period of twelve months terminating six months prior to the valuation date. For instance, if the accounts are made up as at the 31st December, then every year the new purchases can be taken up to the previous 30th June. A little consideration will show that this method will give results sufficiently accurate for all practical purposes, and, moreover, as there are very few cases where interest is payable at greater intervals than six months, it has the advantage of not requiring any sinking fund where no interest has been received. Each year the main group of terminable securities entered in the sinking fund book will be augmented by the group entered as new purchases in the previous year.

I must not close this lecture without making some reference to "Trustee Investments." Most trust deeds contain some directions as to the investments permissible, but where no such directions are given the trustees are limited in their powers by various Acts of Parliament. The Trustee Act, 1893, provides that a trustee may, unless expressly forbidden by the instrument (if any) creating the trust, invest the trust funds in certain classes of securities which are duly set out. I need not trouble to reproduce this list here, but all students for the Part II. examination must study it most carefully; it can be found, together with other important Acts, &c., dealing with investments by trustees, in any edition of *Burdett*, or obtained at one of the big publishing firms, such as Eyre & Spottiswoode's, Waterlow's, &c., at a small cost. You must particularly notice that in the case of most redeemable stocks, trustees must not purchase at a price above the redemption value unless the unexpired term is 15 years or more, and even in cases where the term is longer than 15 years the premium paid in excess of the redemption price must never exceed 15 per cent. Thus, New Zealand 4 per cent. Consolidated Inscribed Stock (1929), now quoted about 106 per cent., is available, because the term is

over 15 years, and the premium is less than 15 per cent.; but Queensland 4 per cent. Inscribed Stock (1915), quoted at about 103½ per cent., is not available, because, although the premium is less than 15 per cent., the unexpired term is under 15 years. I cannot call to mind any example of a redeemable security with an unexpired term of over 15 years which would be a trustee security but for the fact that the quoted price is more than 15 per cent. above the redeemable price. Some few years ago, however, when the general range of prices was much higher there were many such cases.

I have said that most redeemable stocks are subject to this rule, and you must carefully notice those which are not subject to it, such as any securities the interest on which is guaranteed by Parliament.

You will also observe that the Act authorizes trustees to invest in any of the stocks, funds, or securities for the time being authorized for the investment of cash under the control or subject to the order of the High Court. The list of these investments referred to is given in *Burdett* on another page, and the curious point is that certain investments appear under both headings, but with different conditions. Thus the Order of Court authorizes Debenture, Preference, Guaranteed, or Rent Charge stocks of Railways in Great Britain or Ireland, having for ten years next before the date of investment paid a dividend on Ordinary Stock or Shares.

The corresponding clause in the Act of 1893 is:

“In the Debenture or Rent Charge or Guaranteed or Preference Stock of any Railway Company in Great Britain or Ireland incorporated by special act of Parliament, and having during each of the ten years last passed before the date of investment paid a dividend at the rate of not less than three per centum per annum on its Ordinary Stock.”

The Order of Court merely requires that *dividends* shall have been paid for at least ten years, but the 1893 Act requires that such dividends shall have been at a rate of not less than three per cent.

The result of this discrepancy is that there are certain securities concerning which there is some doubt as to whether they are or are not trustee securities. Thus, for example, Great Eastern Railway 4 per cent. Consolidated Preference Stock is a Chancery stock, because a dividend on the Ordinary stock has been paid in each of the last ten

years, but this dividend has twice been below 3 per cent., viz., in 1907 and 1908, and therefore it does not fulfil the conditions of the 1893 Trustee Act as set out above.

There are several other discrepancies in the two authorities, but I will leave the examination of these to students.

The Colonial Stock Act of 1900 authorizes trustees to invest in various colonial stocks, provided that certain formalities have been complied with. It is advisable to look over the list of such investments in order to gain a general idea as to what they are.

The Metropolis Water Act of 1902 provides that water stock shall be included amongst the securities in which a trustee may invest under powers of the Trustee Act, 1893.

Investments by Scotch trustees are provided for under separate acts, which are fully set out in *Burdett*, and concerning which it is unnecessary to speak further.

TWELFTH LECTURE.

Local Indebtedness.

THE subject of Local Indebtedness is perhaps the most difficult to deal with of any included in the Part II Syllabus, and it is not practicable to give in a reasonable space a description that is in any way complete. This is due to the fact that any useful study of local indebtedness is quite impossible without some knowledge of the general principles underlying our system of local government. I shall therefore find it necessary to give some information as to the various functions of local bodies.

In the first place I will ask you to notice some of the principal points of difference between the National Debt and the Local Debt. The National Debt is for the most part permanent, whereas the Local Debt is repayable in varying periods. So strong is the feeling against the creation of permanent local debt that the standing orders of the House of Commons forbid a Committee, to which a private Bill involving borrowing by a Local Body has been referred, to allow a longer period for repayment than 60 years. Another distinction is that the National Debt was contracted mainly for war purposes, and this, of course, is not remunerative, whereas the local debt has been created with the object of producing direct benefit, either in health or in happiness, and in many cases the expenditure results in the production of revenue. A third difference is that the National Debt involves one debtor only, the State, whereas the Local Debt is concerned with a number of debtors of varying financial stability.

In 1884-5 the total amount of Local Indebtedness for England and Wales was £173,207,968, in 1894-5 it was £235,335,049, and at the end of the year 1906-7 it was £494,071,000, the amount remaining in the Sinking Funds being £17,212,000. These figures were given in answer to a question in the House of Commons, and no further details are available at the present time. In making the comparisons, therefore, the year 1905-6 has been taken, as this is the latest period for which the Local Taxation Returns are available. In that year the outstanding indebtedness amounted to £482,983,929, and against this huge debt the Sinking Funds set aside for redemption amounted to only £16,452,299.

In the last eleven years, therefore, the debt has more than doubled. In the same period (*i.e.*, 1894-5 to 1905-6) the rateable value of property has increased from £161,139,575 to £207,067,675, or little more than 28 per-cent. This, on the face of it, looks rather alarming, but an analysis of the various purposes for which the debt has been contracted will show that the situation is not quite so bad as at first sight appears.

It is usual to separate the debt into two parts—Non-productive or Non-remunerative, and Productive or Remunerative. The Non-remunerative Debt may be defined as Debt for services, the charges for which are met almost entirely out of the Rates. The Remunerative Debt may be defined as Debt for services, the charges for which are for the most part met out of the revenues of the undertakings. The former includes loans raised for Poor Law and Educational purposes, the Construction of Bridges, Highways and Street Improvements, Lunatic Asylums, Sewerage, Parks, etc. This portion of the debt accounts for £210,729,179, the amount having increased in the eleven years from £118,203,419, or about 78 per-cent. The principal items are—

	1894-5.	1905-6.	Approximate Increase per-cent.
	millions.	millions.	
Educational	23.0	40.6	76
Highways	30.1	51.8	72
Sewerage	23.7	38.9	64
Poor Law*	7.8	15.6	100
Lunatic Asylums	4.3	10.9	153

* These figures include the debt incurred on account of the Fever and Small-pox hospitals of the Metropolitan Asylums district.

While producing practically no revenue, objects such as Street Improvements, Sewerage, Parks, etc., are of direct benefit to the community, and therefore have the effect of increasing the rateable value of the district, thus indirectly producing revenue.

The remunerative portion of the debt has increased from £117,131,630 in 1894-5 to £272,254,750 in 1905-6, that is about 132 per-cent. The principal items comprised in this total are:

—	1894-5.	1905-6.	Approximate Increase per-cent.
	millions.	millions.	
Electric Lighting	1·4	27·5	1864
Gasworks	16·9	23·7	40
Waterworks	44·0	118·8	170
Tramways	1·5	28·1	1773
Harbours, Docks, etc.* ...	32·8	44·3	35
Markets	5·8	7·7	33
Housing of the Working Classes	5·7	9·3	63

* There will be a large increase in this item when the loans of the Port of London Authority are included in the Returns.

The large increase in the Waterworks debt is accounted for by the inclusion of the Metropolitan Water Board amongst the Local Bodies, this authority having taken over the waterworks in the London District, the debt so contracted being £47,438,852, at the end of the financial year 1905-6.

The interest and repayments of the loans in this section are provided out of the revenues of the various undertakings, and it is only in the event of the revenues proving insufficient that they constitute a charge on the rates. Although very considerable sums are shown as profits, and as such are transferred in aid of the rates, it is impossible to say whether the undertakings are commercially successful, owing to the manner in which the accounts are made up. For example, in some cases the undertakings are charged with establishment expenses, whereas in others little or nothing appears under this heading. The question of depreciation is also one on which the opinions of various bodies seem to differ considerably.

In 1905-6 a sum of £927,225 was shown as profit made on the undertakings owned by some of the boroughs. On the

other hand, in certain other boroughs £253,897 had to be transferred from the rates to make up deficiencies. From the Local Taxation Returns for 1905-6 it appears that the receipts from tramways, electric lighting, and gasworks exceed the expenditure charged against them. On the other hand, the receipts from waterworks are in the aggregate less than the expenditure, but as some local bodies do not charge themselves for the water they consume, it is impossible to arrive at any very definite conclusion. Obviously waterworks are so closely connected with public health and sanitation that it may be necessary deliberately to encounter a loss, *e.g.*, the new Birmingham supply could not be run as a commercial enterprise.

I shall in the course of this lecture give some information as to the ways in which money is borrowed by the different local bodies. One important class of lenders consists of the insurance companies, and it may save time and also be more directly useful if I arrange the information contained in this lecture in the order of the questions generally asked on the forms of proposal supplied by insurance companies to intending borrowers. While the exact form of this proposal may vary in different companies, the essential features are always the same.

It is usual to require a preliminary form to be filled in, giving the main particulars, and if this is satisfactory, the proposal form is then issued, which is much fuller and asks for many details which would not be required unless it was decided to proceed with the loan.

The first question on the proposal form is:—"What is 'the full name and description of the authority applying for 'the loan?'" It will be useful in order to show the range of duties which are performed by local authorities to state the various units of local government and their statutory powers. I may mention that at the present time there are about 26,000 authorities which are classed as local bodies, and they may be arranged under the following headings:—

(1) *County Councils*.—These were created under the Local Government Act, 1888. They took over the administrative powers previously exercised by the Court of Quarter Sessions. To a large extent they control the minor bodies, but they also have a large number of duties which can only

be performed by an authority having jurisdiction over a wide area. These duties include:—

- (a) The maintenance of county bridges and “main roads.”
- (b) The provision and management of Pauper Lunatic Asylums.
- (c) The maintenance of Assize Courts and County Property generally.
- (d) The establishment and maintenance of Reformatories and Industrial Schools.
- (e) Duties as Education Authorities under the Education Act, 1902.
- (f) The management of the County Police—jointly with the Quarter Sessions.
- (g) Duties as Authorities under the Small Holdings and Allotment Act, 1907.

Generally their jurisdiction extends over the whole administrative county, excluding the county boroughs, but as regards some matters certain areas are outside their authority. As instances of these the management of the Police and Educational duties may be mentioned.

(2) *Boroughs*.—In point of origin these are probably the oldest form of Local Government, and it is possible to trace them back to a period prior to the Norman Conquest. They are at present regulated by the Municipal Corporations Act, 1882. Their duties include:—

- (a) The acquisition and management of Corporate Land and Buildings.
- (b) The maintenance of bridges in the Borough for which the County is not liable.
- (c) The management of the Police Force in Boroughs which had a population of more than 10,000 in 1881.
- (d) Duties as Education Authorities: Boroughs with a population of more than 10,000 were constituted Education Authorities for elementary education under the Education Act, 1902.
- (e) Providing accommodation for Lunatics: In some cases Boroughs are Local Authorities under the Lunacy Act, 1890, and are required to provide accommodation for Pauper Lunatics.

- (f) Various duties arising under the Diseases of Animals Act, 1894; Light Railways Act, 1896; Inebriates Reformatories Act, 1898; Weights and Measures Act, 1904. In addition to these there are various Acts that may be adopted by the Boroughs at their discretion, such as: the Burial Acts, 1852-1893; the Baths and Wash-houses Acts; the Public Libraries Acts; the Public Improvement Act, 1860, &c. These acts are referred to as the Adoptive Acts.

The most important duties of a Borough, however, are as an "Urban Sanitary Authority" under the Public Health Acts. These Acts have enormously increased the responsibilities of Local Bodies. There are numerous Acts, but the most important is the Public Health Act, 1875, which imposes the following duties on an Urban Sanitary Authority:

- (g) The provision of a proper system of sewerage and drainage.
- (h) The provision of a water supply for the district or the taking over of an existing supply.
- (i) The removal and destruction of house refuse.
- (j) The provision of Hospitals, Mortuaries, and Cemeteries.
- (k) The maintenance and improvement of streets and pleasure grounds.
- (l) Provision of Markets and Slaughter Houses.
- (m) Lighting for the district.

Other important duties are:—

- (n) The carrying out of the "Housing of the Working Classes Acts," which relate to improvement schemes, workmen's dwellings, &c.

Under the Local Government Act, 1888, a new class of Borough was created to be known as a "County Borough." These County Boroughs were given practically all the powers of County Councils. They are not within the jurisdiction of the County Council for the county in which they are situated, although they contribute to some of the county expenses. Most towns with a population of more than 50,000 are county boroughs. County boroughs may be created by a provisional order of the Local Government Board, which must, however, be confirmed by Parliament.

(3) *Urban District Councils* were created under the Local Government Act, 1894, and superseded the Local Boards of Health under the Public Health Act, and the Improvement Commissioners instituted under various Acts. They act in two capacities :—

(a) As an Urban Sanitary Authority.

(b) As a District Council.

Under heading (a) they carry out the provisions of the Public Health Acts and Housing of the Working Classes Acts, already referred to; under heading (b) they may adopt all or any of the "Adoptive" Acts, and in a district with a population of 20,000 and upwards, act as an Education Authority for elementary education under the Education Act, 1902.

(4) *Rural District Councils*.—These were also created under the Local Government Act, 1894, replacing the Local Boards of Health, and the Highway Boards. They perform the same functions under the Public Health Acts in rural districts as Urban District Councils do in urban districts, but certain powers under these Acts can only be exercised by a Rural District Council by permission of the Local Government Board.

(5) *Guardians of the Poor*.—These came into existence by virtue of the Poor Law Amendment Act, 1834. Their duties are :—

(a) Local Administration of the Poor Law.

(b) Revision of the Valuation Lists on which the Poor Rate is assessed.

(c) Registration of Births, Deaths and Marriages.

(d) Enforcement of the Vaccination Acts.

(6) *Parish Councils*.—These were created by the Local Government Act, 1894, which took the Civil Administration of the Parish out of the hands of the Ecclesiastical Vestry. Such a Council must be created by election in any parish with 300 inhabitants, but may be elected in smaller parishes by order of the County Council. Its duties include :—

(a) The management and maintenance of all Civil Parish Property.

(b) The provision of parochial buildings for Offices and Meetings.

- (c) The provision of Recreation Grounds and Public Walks.
- (d) The provision of Fire Escapes and Engines.
- (e) The utilisation of existing sources of Water Supply.
- (f) The acquirement by agreement or compulsion of lands either by hire or purchase and the hiring of lands for Allotments.

The Parish Council may also adopt at its discretion all or any of the "Adoptive" Acts (subject to the approval of the Parish Meeting when required).

(7) *The Parish Meeting*.—This consists of all the parochial electors. The Chairman and the overseers, who are elected annually, form a corporate body. The Parish Meeting exercises the functions of a Parish Council in those Parishes where no council has been elected.

A few words must be said on the subject of London Local Government, which has always been differently constituted from that of the rest of the country. At the present time the local affairs of London are under the control of the following bodies :—*

(8) *London County Council*.—This body has much wider powers than other County Councils, performing many duties which in the Provinces are under the control of Borough and Urban District Councils. It took over the powers and liabilities of the Metropolitan Board of Works. It is not subject to the supervision of the Local Government Board, except as regards audit and perhaps one or two minor matters, but is controlled by Parliament by means of the Money Bill, which the Council has to present annually to the House of Commons. The periods for its loans have to be sanctioned by the Treasury.

(9) *Metropolitan Borough Councils*.—These were established by the London Government Act, 1899, as a reorganisation and consolidation of the vestries and other local authorities. They are Urban Sanitary Authorities, and may adopt any of the "Adoptive" Acts. They are also "local authorities" for the purpose of the Electric Lighting Acts.

(10) *Metropolitan Asylums Board*.—This was created in 1867, and provides asylums for Imbeciles, and Hospitals for

* I have not referred to the Poor Law Unions in London, as their duties do not differ materially from those of the unions in the provinces.

cases of Infectious Diseases. It does not deal with Lunatics, as these are under the control of the County Council.

(11) *Metropolitan Police Commissioners*.—This body manages the whole of the Police Force over an area comprising about 700 square miles round London, excluding the City.

(12) *Metropolitan Water Board*.—This body controls the water supply for an area of about 540 square miles round London. Its members are drawn from the London County Council and the various local bodies in the area. No portion of the debt charges falls on the rates. The Water Board Stock was issued under the authority of the Metropolis Water Act, 1902, the redemption period allowed being 100 years.

(13) *The Corporation of the City of London*.—This is the only Borough which has retained its ancient charter by which its duties are still regulated. It is not subject to the provisions of the Municipal Corporations Act, 1882.

It will be seen that there are at present thirteen different kinds of local authorities, seven of which refer to the country generally and six to London alone. In addition to these, however, there are many cases where districts have joined together to form Joint Boards for Hospitals, Lunatic Asylums, Water Supply, &c. There are also a few survivals of older local authorities which, however, are of little importance.

The next important question on the proposal form is: "Purpose and term of years for which the money is required."

It is impossible to give all the purposes for which loans may be raised, as there is hardly anything for which the cost may not be raised by borrowing. In the Appendix of the Report of the Select Committee of 1902 on the Repayments of Loans by Local Authorities a list is given of no less than 117 general headings, and even this long list is by no means exhaustive. To indicate the general lines on which the Local Government Board works in fixing the terms of the Loans, a few items may be mentioned:—

Land	60-80 years.
Baths, and Stone or Brick Buildings	20-40 „
Electric Lighting purposes . . .	Various terms.
(Ranging from 30 years for cables to 10 years for arc lamps.)	

Gasworks	Various terms
(From 30 years for gasometers to 2 years for retorts.)	
Footways	5 to 20 years.
(According to the material used.)	
Steam Rollers and Trees for Street Improvements	10 years.
Horses and Harness, Library Books	5 „

Frequently the purpose for which the loan is required involves a number of these items, and to avoid the practical difficulties that would arise if the loan were split up into a number of small sections, an equated period is allowed. This period is arrived at by multiplying the cost of each item by the period allowed, and dividing the total of these products by the total cost. For example:—

	Cost.	Term.
Building	£2,500 × 30 years =	£75,000
Land	£1,500 × 60 „ =	£90,000
	<u>£4,000</u>	<u>£165,000</u>
$\frac{£165,000}{£4,000} = 41 \text{ years} = \text{the equated period.}$		

The third question on the proposal deals with the suggested method of repayment of the loan.

In order to speak of the various methods of repayment I must also speak of the different ways in which money is raised, and I will therefore set these out in order:

(1) *By the Issue of Stock.*—The first of the general Acts dealing with the issue of stock by Local Authorities was the Local Loans Act, 1875, which applies to any local authority empowered to levy a rate as therein defined. It does not confer any borrowing powers, and for various reasons is very little used. Probably one of the principal defects is that stock issued under the Act is secured only on the Local Rate or property specified at the time of issue, and not on all the rates and revenues of the issuing authority.

The principal Public Acts under which stock is now issued are:—

- (a) The Local Government Act, 1888, by which County Councils are authorised to issue Stock subject to the Local Government Board regulations. The

regulations at present in force prescribe amongst other things that the stock shall be repaid within 40 years. A point to be noticed in connection with issues under this Act is that where stock has been issued the Council cannot borrow on Mortgage for a longer period than 5 years.

- (b) The Public Health Acts, Amendment Act 1890, by which Municipal Corporations and Urban District Councils may raise money by the issue of stock subject to the consent of the Local Government Board. Under the regulations at present in force, the stock must be repaid within such period, not exceeding 60 years, as may be fixed by the Local Government Board, and ranks *pari passu* with all other charges on the revenue of the Authorities, present or future.

Regulations under each of these Acts were issued in 1891, 1897 and 1901, and are known as the "County Stock Regulations 1891, 1897 and 1901," and the "Stock Regulations 1891, 1897 and 1901" respectively. These regulations are very similar and contain the following provisions, among others, in common.

- (1) The minimum issue price of the Stock is to be 95 per cent. unless the Board otherwise consents.
- (2) All Stock is to rank *pari passu*.
- (3) That a "Stock (Redemption) Fund Account" shall be instituted, to which must be carried each year such sums as will, after payment of expenses, redeem the Stock within the period.
- (4) If Stock is issued for part only of the term for which it is authorised, at the end of such shorter term an amount, equal to the balance which would have been outstanding had the original loan been for the full term, may be borrowed for the remainder of the term.
- (5) If dividend remains unpaid for two months, after demand in writing, the Stockholder may apply for the appointment of a receiver.
- (6) The Stock (Redemption) Fund may be utilised by the Local Authority instead of issuing additional Stock.

It may be stated here that doubt had recently arisen as to the wisdom of the regulation which permits local authorities, instead of exercising a power to borrow by the issue of new stock, to use for that purpose moneys standing to the credit of redemption funds and sinking funds, and a Select Committee, appointed in 1908 to enquire into the matter, has just reported in favour of it being continued subject to proper restrictions and conditions.

In addition to the issues under these Acts, very large amounts of stock are issued under the authority of Private or Local Acts. The London County Council, for instance, issues its Stock under authority obtained by its Annual Money Bill.

The stock is raised as a whole in respect of specified borrowing powers which may have been obtained for one or more purposes under one or more orders, but particular holdings of the stock are not ear-marked for particular purposes. As a general rule no actual date is stated for repayment, and the more usual method is to fix a date by which the stock must be repaid, and a date or dates after which the stock may be repaid at the option of the Local Body.

To provide for the redemption of the stock a Loans Fund is set up, to which is carried (a) the sum required for the payment of the dividends; (b) Sinking Funds sufficient to repay the amount borrowed for each particular purpose within the period mentioned in the order sanctioning the borrowing for such purpose.

It will be seen, therefore, that, although the stock may be irredeemable to the extent that the stockholder has no power to demand repayment, yet the regulation as to the setting up of Sinking Funds limit the life of the stock to a maximum period fixed by the period or periods mentioned in the borrowing powers.

You will remember that in speaking of the *Stock Exchange Daily Official List* I called your attention to some stocks issued by local authorities which are irredeemable, but at the present time such stocks are not issued.

(2) *Short Term Bills*.—These are somewhat similar to Treasury Bills, and are issued by large Corporations, such as Liverpool and Birmingham. The power to raise money in this way is always obtained by a Local Act; it has never been given by any Public Act. The first instance of this form of

security being issued was that of the Metropolitan Board of Works in 1877, and the method has been continued by its successors, the London County Council.

(3) *Mortgage of the Rates*.—This method is of peculiar importance to us, because it is the one invariably adopted when money is borrowed from Insurance Companies. According to the summary of the balance sheets given in the Board of Trade returns issued in April, 1909, the total amount borrowed in this way from Insurance Companies was £46,953,042. The loans are generally repayable on the annuity plan, that is by means of a number of equal instalments comprising principal and interest, and, as most of you know, schedules are usually supplied setting out the proportion of principal and interest in each payment. Income tax is chargeable on the interest portion only, and the ledger value is reduced each year in accordance with the amount of principal repaid. This method of repayment is peculiarly suitable for the local authorities, and is specified in most of the Acts as one of three allowed. The other two methods are (a) By equal instalments of principal; this is occasionally adopted when borrowing from Insurance Companies, but it is not generally favoured by the local authorities, as it entails much larger payments in the early years; (b) By setting up a sinking fund to accumulate to the capital amount at the end of a given period. It will be recognised that the investment of such a sinking fund involves considerable trouble, and it is impossible to foretell exactly what rate of interest will be obtained; the annuity plan avoids any such difficulty and is by far the more usual method. The reason why Insurance Companies have obtained such a large amount of this business is, to a large extent, due to the fact that the annuity plan provides an investment of a wasting nature which is never popular with the ordinary investor. For obvious reasons this characteristic is of little importance to the big Insurance Companies, who, consequently, have secured almost a monopoly of this class of investment. Several statutory forms of mortgage have been given in various Acts, notably the Public Health Act, 1875, and the Municipal Corporations Act, 1882.

Apart from the Insurance Companies, the principal lenders on the security of mortgages of the rates are the Public Works Loan Commissioners; but, in order to explain how

borrowings are effected from them, I must give an explanation of Local Loans Stock. If you will turn to the *Stock Exchange Daily Official List* you will find that the amount of Local Loans Stock now in existence is £71,058,813, nearly all of which is inscribed at the Bank of England; of the remainder, about £1,000,000 is inscribed at the Bank of Ireland, and about £1,000,000 is in the form of Stock Certificates to Bearer. The stock bears interest at the rate of 3 per cent., which is payable *quarterly*, on 5 January, 5 April, 5 July, 5 October, and the capital is redeemable at par on six months' notice *at any time after 1 April, 1912*.

You must particularly notice that although Local Loans Stock is not part of the Funded Debt, yet it is secured by means of a contingent charge on the Consolidated Fund in respect of interest. Issues have generally been made on the "tender" system, the last one being in 1904, at a minimum price of £97, the average realised being £98. 6s. 1d. per cent.

Before explaining anything further, it is necessary to give you some idea as to how this Local Loans Stock originated. Although, undoubtedly, advances to Local Bodies had been made previous to 1792, that is the first date at which any particulars are obtainable. The general system, however, of making advances from the Exchequer for the purposes of public works commenced in 1817, when the Exchequer Loan Commissioners were established.

All I need explain in reference to these early advances is that various amounts were lent from time to time to all kinds of Local Bodies, who paid interest and gave security, but, as you will see in a moment, there were numerous defaults. The money lent was obtained either from the annual national revenue or by means of Exchequer Bills.

The whole of this business was managed (or mis-managed) in a most extraordinary manner, and very little notice was taken of any such unimportant details as the distinction between principal and interest. The following extract from the Treasury Minute of 23rd May, 1887, shows this very clearly:—

"The Chancellor of the Exchequer proceeds to ask the
 "consideration of the Board for measures intended to impose
 "some check on laxity in loan legislation and administration.
 "Up to the present time the money required by the Lending
 "Departments for the purpose of Local Loans has been

“supplied either by the Exchequer or out of savings banks
 “deposits through the National Debt Commissioners. From
 “the commencement of the loan system in 1792 up to 1843,
 “Local Loan funds were specially raised by means of
 “Exchequer Bills, and the transactions based upon them did
 “not constitute a separate account, and no general profit and
 “loss account showed the general working of Local Loan
 “finance to the Treasury and to Parliament. Since 1843
 “money for Local Loans has been advanced from the
 “Exchequer as wanted, and the Exchequer has not borrowed
 “unless the general financial requirements of the year made
 “borrowing necessary. Thus a surplus of ordinary income
 “over ordinary expenditure has practically been used for
 “Local Loans, and as no separation was made until 1874
 “between interest and principal in the sums repaid to the
 “Exchequer by the Treasury, or by the Public Works Loan
 “Commissioners, or by the Commissioners of Public Works
 “in Ireland, the interest received, although a perfectly
 “legitimate source of income, was not brought to the credit
 “of the Budget as part of the national income for the year,
 “but remained part of the cash balance in the Exchequer,
 “and was used for any expenditure of a capital or, indeed,
 “extraordinary character which might arise within the year.
 “The Board will understand the difficulty of ascertaining
 “accurately the financial results of Local Loan legislation so
 “long as the transactions of loan finance were recorded in
 “the manner described.”

Although Sir Henry Parnell, as early as the year 1829,
 had given excellent advice as to the manner in which the
 accounts for Local Loans should be kept, and Sir Stafford
 Northcote, in 1874, had succeeded in making several useful
 alterations, it was not until 1887 that the matter was finally
 set in order by Mr. Goschen, and the accounts placed on a
 proper financial basis.

When Mr. Goschen took the matter in hand, he found
 that of the total amounts advanced there remained still unpaid
 about £49,000,000, of which, however, about £12,000,000 was
 recognised as lost. Many loans had been made which, as he
 pointed out, were from the first really in the nature of gifts,
 and he spoke very strongly upon the dangers of such a
 system. A sum of about £4,271,000 advanced to Ireland
 had been remitted in return for the extension of Income Tax

to that country, and another £2,231,000 for famine relief had also been forgiven.

You may ask who it was who had made these advances to the various local bodies, and I can only reply that it is sufficient for our purpose to refer to them as the Lending Departments. These Lending Departments are still in existence, and consist of—

- (1) The Treasury.
- (2) The Public Works Loan Commissioners.
- (3) The Commissioners of Public Works for Ireland.
- (4) The Irish Land Commissioners.
- (5) The Fishery Board of Scotland.

Before 1887 the money required by the Lending Departments to meet the applications for advances made by local bodies had been supplied by the Treasury, who had used its cash balances (which otherwise would have been applied in reducing the National Debt) for this purpose. It frequently happened, however, that these balances were insufficient, and in such cases the necessary amounts were raised by the issue of Exchequer Bonds, Exchequer Bills, and Treasury Bills. The Exchequer Bonds were afterwards funded, being converted into $2\frac{1}{2}$ per-cents. and Consols. To lessen the amount of borrowing by public issues the Treasury had authorized the National Debt Commissioners, in their capacity of Trustees for the Savings Banks, to advance money to the Public Works Loan Commissioners (who are the most important Lending Department). On the 31st of March, 1887, the debt due by the Lending Departments to the Exchequer and the Savings Banks was as follows:

(1) Raised by the Treasury by means of Consols, $2\frac{1}{2}$ per-cents, Treasury Bills and Exchequer Bills, and advanced to the Lending Departments . . .	£14,150,000.
(2) Advanced by the Treasury out of cash balances in their hands . . .	12,907,344.
(3) Advanced by the National Debt Commissioners in their capacity of Trustees for the Savings Banks. . .	9,468,713.
Total . . .	<u>£36,526,057</u>

The exact amount of the debt was £37,169,774, but of this amount £643,717 was subsequently remitted, and it has not therefore been included in the above figures.

It will be seen that the debt contracted by the State on local account was hopelessly involved with the National Debt, and it was impossible to present the accounts in such a manner that the two could be disentangled. Mr. Goschen proposed to set up a new authority to deal with the local debt which, from the point of view of book-keeping, was to be quite distinct from the national finances, and he therefore created a Local Loans Fund which was to be managed by the National Debt Commissioners. This fund was to make all necessary advances to the Lending Departments and to receive all payments made by local bodies on account of capital and interest. If the receipts were not sufficient to meet the demands of the Lending Departments, fresh funds were to be obtained by the issue of a new stock to be known as the Local Loans Stock. This arrangement freed the Imperial Government from all complications in connection with local loans finance in the future, but it still left the entanglements of the past untouched, and these were accordingly dealt with in the following manner. The Lending Departments, who owed the State £27,057,344 and the Savings Bank £9,468,713, were required to recognize one new creditor, viz., the Local Loans Fund, in place of their two existing creditors. In order to effect this novation the Treasury, acting for the Local Loans Fund, created £36,526,057 of Local Loans Stock. This was all inscribed in the names of the National Debt Commissioners in their capacity of trustees for the Savings Banks. On being credited with the Local Loans Stock, the Savings Banks handed over to the Local Loans Fund the Lending Departments' bonds for £9,468,713 and Consols for the balance, viz., £27,057,344. The Consols were handed over to the Treasury by the Local Loans Fund in exchange for the Lending Departments' bonds for an equivalent amount. The Government immediately cancelled these Consols. The effect of these transactions was (1) the liabilities of the Local Loans Fund were consolidated into £36,526,057 of Local Loans Stock; (2) the debt due to the State was extinguished by the cancelment of the Consols; (3) the Savings Banks had altered their investments by substituting £36,526,057 of Local Loans Stock for £9,468,713 of the

Lending Departments' Bonds and £27,057,344 Consols. The reason for this somewhat complicated arrangement was to enable the State to obtain repayment of the amount advanced which obviously would not have been done by merely allotting Local Loans Stock to the Government. The matter was much facilitated by the fact that the Trustees for the Savings Banks and the managers of the Local Loans Fund were the same persons, viz., The National Debt Commissioners.

I have already explained that, in the event of the interest obtained from the local bodies not being sufficient (after deduction of various expenses) to pay the interest on the Local Loans Stock, the Consolidated Fund is liable. The rate paid by the local bodies who borrow from the Lending Department is always higher than the rate paid by the National Debt Commissioners on the Local Loans Stock. The excess is used in the first place to meet necessary expenses, and secondly to form what may be regarded as a reserve fund. This fund is known as the Surplus Income Account, and at the present time amounts to about £250,000. In the accounts of the Local Loans Fund there is always an item which in ordinary accounts would be known as a "Carry Forward Balance," and this amounts to nearly another £250,000.

It was provided by the National Debt and Local Loans Act, 1887, that, after providing for payment of interest on the stock, an annual sum of £130,000 was to be provided out of the Local Loans Fund. This was known as the restitution annuity, and was carried to a separate account called the Restitution Fund in order to repay gradually the £5,500,000 bad debts previously incurred and any other bad debts which might in future be incurred. I am mentioning this Restitution Annuity because the above Act provides as regards bad debts that:

"Where the whole or any part of the principal of any Local Loan is, by reason of the same not being likely to be recovered, directed by Parliament to be written off from the account of assets of the Local Loans Fund, the amount of such principal shall be treated as a loss to the Exchequer, to be made good by means of the Restitution Fund under this Act, . . ."

In 1897 the Public Works Loans Act provided that the Restitution Annuity should cease, and only net surplus interest be carried to a "Surplus Income Account." The

words "... to be made good by means of the Restitution Fund under this Act, ..." were repealed, and consequently the position of the Government in regard to the Local Loans Stock was somewhat altered. It cannot be said that Local Loans Stock is guaranteed by Government, but the conditions are such that there is no doubt whatever that it is practically equivalent to a Government security.

I may here mention that the Colonial Loans Act of 1899 authorised the Treasury (which you will remember is one of the Lending Departments) to advance £3,351,820 by way of loan to certain Colonies, such advances to be local loans within the meaning of the National Debt and Local Loans Act, 1887. The whole of this amount was not then lent but further similar advances have been made from time to time.

Of the amounts advanced by the Lending Departments there remained outstanding at the 31st March, 1907:

Treasury	£529,653
Public Works Loan Commissioners .	£49,680,767
Commissioners of Works for Ireland .	£9,692,687
Irish Land Commissioners	£8,097,654
The Fishery Board for Scotland . . .	£162

The advances made by the Treasury, the Irish Land Commissioners, and the Fishery Board for Scotland, do not come under the heading of local indebtedness, but the other two departments are directly engaged in making advances to local authorities, and must be considered as competitors of the insurance companies. It will therefore be necessary to consider their methods, and for this purpose it will be sufficient to deal only with the Public Works Loan Commissioners who, it will be noticed, have advanced by far the largest amount. By the Public Works Loan Act, 1896, the Commissioners are empowered to make advances in respect of work for which any County Council, Borough Council, District Council, or Parish Council are authorised to borrow. In 1904 the Commissioners, at the instigation of the Treasury, decided to refuse to make any advances under Local Acts or to Local Authorities with a rateable value of £200,000 or over. Exceptions are made in the case of Loans to County Councils for the purposes of the Education Act, 1902, and also in the case of loans under the Small Dwellings Acquisition Act, 1899, and the Housing of the Working Classes Acts.

The Public Works Loan Commissioners do not now lend, however, for Commercial Works or Private Street Improvements, or to Local Authorities who can borrow from the London County Council.

The period of the Loans is of course primarily a matter for the Government Department which sanctions the Loan, but it by no means follows that the Commissioners will lend for the full term sanctioned, and indeed it would seem that they use their best efforts to reduce the term as much as possible.

The following extract from Biddell's "Loans of Local Authorities" will also show how the Commissioners endeavour to reduce the duration of loans :—

"With a view to discourage borrowing for long terms it is the general practice of the Commissioners to require that loans for periods exceeding 30 years shall be repaid by equal yearly or half-yearly instalments of principal, with interest on the balance of principal from time to time outstanding; while as regards loans for shorter periods they are willing to allow repayment to be effected by means of equal yearly or half-yearly instalments of principal and interest combined."

The rate of interest at which loans are advanced is fixed by the Treasury. By the Public Works Loan Act, 1897, the rate is to be not less than $2\frac{3}{4}$ per cent., and due regard is to be paid to the duration. The rates have been revised from time to time and since the 9th September, 1907, have been as follows :—

Not exceeding 30 years . . .	$3\frac{1}{2}$ per cent.
" 50 " . . .	$3\frac{3}{4}$ "

It is interesting to notice that the rate of interest increases with the duration of the loan. An Insurance Company generally looks upon a long term investment more favourably than a short term one and is therefore usually satisfied with a somewhat lower rate of interest.

Various fees are charged by the Commissioners, particulars of which will be found in any of their annual reports.

Up to 1895 it was the custom for the Commissioners to receive repayments of capital before the due dates. In that year money was cheap, and nearly £6,000,000 was repaid in advance evidently because the Borrowers found they could

obtain the money more cheaply elsewhere. The money could not be re-lent; it was therefore necessary to purchase Local Loans Stock in the Market, and the price being about 111 per cent., a considerable loss resulted. To avoid any repetition of this state of affairs, the following regulations were made:—

- (a) That the applicants must give three months notice of their intention to repay.
- (b) That they agree to repay in such instalments and in such sums as the Commissioners shall require.
- (c) That for every £100 outstanding they shall repay such sum as shall be equivalent to the price of £100 Local Loans Stock.

It must be mentioned that the Commissioners claim priority for their loans over all others past or future, but the claim is not conceded by other lenders, and has never been legally tested.

I have now given you particulars of the three most important methods by which money is raised by Local Authorities, viz. :—

- (1) By the Issue of Stock;
- (2) Short Term Bills;
- (3) Mortgage of the Rates;

there is only one other method to which I need refer, and that is known as Municipal Banking.

- (4) Municipal Banking is a comparatively recent institution. The local body accepts small sums on deposit at a certain rate of interest and thus acts in much the same way as a deposit bank. The depositors obtain a somewhat better rate of interest on small amounts than they would do from the Post Office, and of course the Local Authority is enabled to raise money somewhat more cheaply than it otherwise could.

The next important question on the proposal form is:
 “What are the Acts and Sections under which the local
 “authority is empowered to:—

- “ (a) Borrow the amount required.
- “ (b) Mortgage the rate for that amount.
- “ (c) Repay the Loan in the manner proposed.”

Practically all loans raised under the authority of a Public Act require the sanction of a Government Department, which is generally the Local Government Board. The practice of the Board in this respect was explained by Mr. Kershaw (one of the Assistant Secretaries of the Board) in his evidence before the Select Committee, in 1902, on the Repayments of Loans of Local Authorities. After stating that the maximum term allowed under any Public Acts is 60 years (in the Housing of the Working Classes Act, 1903, and the Allotments Act, 1907, it is now 80 years, and in the Metropolis Water Act, 1902, 100 years), he went on to say that the maximum term was granted by the Board only when the loans were required for the purchase of land, as they considered that in such cases the outstanding balance of the loan was never likely to be more than the value of the land. As regards loans for other purposes, there have been two main guiding principles: (a) "That the period of the loan should not exceed the period during which the works are likely to endure and be of use for the purpose which they are designed to serve"; (b) "That the ratepayers of the future should not be unduly burdened with local debt, and so be less able to discharge efficiently the larger duties that are liable to come upon them."

An important point to be noticed is that the Local Government Board does not acknowledge any responsibility as to the prudence or advisability of the work undertaken. Although it authorises the borrowing authority to incur the loan, it is concerned only with the borrowers and not in any way with the lenders, and its sanction is not conclusive evidence that the local authority is legally empowered to borrow for such works.

Loans may be raised under the authority of a public or private Act, and in the latter case the provisions of the Act must be referred to. As already mentioned, local Acts are very numerous, and in the Report of the "Select Committee on Repayment of Loans of Local Authorities" complaint was made that local bodies frequently promoted private Acts when the necessary sanction could have been procured from the Local Government Board under a Public Act, the reason being that better terms could thereby be obtained.

The principal Public Acts under which borrowing is authorised are:—

I. *The Public Health Act, 1875*.—This is by far the most important, and more money has been raised under its provisions than under those of any other.

The powers of borrowing under the Public Health Act are as follows :—

- (1) Any Rural, Urban, or Borough Council may, with the sanction of the Local Government Board, borrow, for the purposes of defraying the expenses incurred under the Act, on the credit of any fund, or all or any of the rates out of which it is authorised to defray such expenses.
- (2) The sum borrowed, together with the loans outstanding, under the Sanitary Acts and under this Act, shall not exceed two years' assessable value.
- (3) The loan must be repaid within such period as may be sanctioned by the Local Government Board, but not to exceed 60 years. It must be repaid either by :—

(a) Equal yearly or half-yearly instalments of principal ;

(b) Or of principal and interest combined ;

(c) Or a sinking fund shall be set apart, and accumulated at compound interest by investing the same in purchase of Government securities. (The power of investment was widened by the Trustee Investment Acts, 1889, 1893, 1900, which enable local authorities to invest in any of the stocks mentioned in these Acts, but they are not to invest in their own stocks.)*

By Section 235, where the local authority possesses land or plant for sewerage disposal, it may borrow on the security of such land or plant. Where the amount raised does not exceed three-fourths of the purchase price of such lands the

* Other less important provisions are as follows :—

- (4) Money shall not be borrowed except for permanent works, including in this term, works the cost of which in the opinion of the Local Government Board ought to be spread over a term of years.
- (5) Where the sum to be borrowed, together with the outstanding loans would exceed one year's assessable value, the loan shall not be sanctioned until an officer of the Local Government Board has made an enquiry and reported.
- (6) When money is borrowed for the purpose of repaying an existing loan the time for repayment shall not exceed the unexpired portion of the existing term.
- (7) Every mortgage must be by deed and must be made in the form given in Schedule 4 of the Act.

powers of borrowing conferred by this section are distinct from and in addition to the general borrowing powers mentioned previously.

The Act applies generally to all Sanitary Authorities situated outside the Metropolis.

II. *The Municipal Corporations Act, 1882.*—Under provision of Section 106 of this Act, the Council may, with the approval of the Local Government Board, borrow on the security of any corporate land, or of any land proposed to be purchased, or of the Borough Fund or Borough rate, or of all or any of those securities, for the purpose of purchasing land, or for the erection of any building for which the Council is authorized by this Act.

By Section 112, where the Local Government Board approve a mortgage under this Act, it may, as a condition of its approval, require that the money borrowed shall be repaid within 30 years or any less period, and also that it shall be repaid either by instalments or by means of a sinking fund, or both.

The Act applies only to Boroughs. It is peculiar in this respect, viz., that, with one exception under the Public Health Act, 1875, it is the only Public Act authorizing the mortgage of land either separately or in conjunction with the rates.

III. *Local Government Act, 1888.*—This applies only to County Councils. By Section 69 they may borrow for the purpose of:—

- (a) Consolidating the debts of the county.
- (b) Purchasing land, or for any building purposes authorized by the Act.
- (c) For any permanent work or any other thing the cost of which the Local Government Board thinks ought to be spread over a term of years.
- (d) For making advances in aid of emigration with a guarantee for repayment from any local authority.
- (e) For any other purpose for which the County Council or Quarter Sessions are authorised by the Act to borrow.

The loans must be sanctioned by the Local Government Board and are secured on the County Fund and the revenues of the Council.

The debt of the Council is limited to one-tenth of the rateable value, but this excludes the debt incurred under the Education Acts, Allotment Acts, and Housing of the Working Classes Acts. The limit may be exceeded on the authority of provisional order of the Local Government Board confirmed by Parliament.

The maximum period for which money may be borrowed on mortgages is thirty years, and loans must be repaid by equal yearly or half-yearly instalments of principal and interest combined, or by means of a sinking fund.

As already mentioned the Council may also raise money by means of stock which is to be issued, transferred and dealt with in accordance with the County Stock Regulations of the Local Government Board. Three sets of regulations have been issued, viz., in 1891, 1897, and 1901.

It must be remembered that where a County Council issues stock it is prohibited from borrowing on mortgages for a longer period than five years.

IV. *The Poor Law Acts*.—These apply only to the Guardians of the Poor. By the 1889 Act the Guardians may, with the sanction of the Local Government Board, borrow for the purposes of any permanent works or anything the cost of which in the opinion of the Board ought to be spread over a term of years. The total debt may not exceed one-fourth of the total annual rateable value of the Union, but the Local Government Board may by Provisional Order extend this maximum to one-half of the rateable value.

The 1897 Act limits the debt of the Metropolitan Asylums Board to one-tenth of the rateable value, which may be extended to one-fifth with the consent of the Local Government Board.

Section 1 of the 1897 Act restricts the term of the loan to a maximum period of sixty years, and directs that it shall be repaid by equal yearly or half-yearly instalments of principal, or principal and interest, or by means of a sinking fund.

By the same section Guardians may borrow money without the consent of the Local Government Board for the purpose of repaying any outstanding loan.

V. *Housing of the Working Classes Acts, 1890–1903*.—These Acts apply to County Councils, Borough Councils and Urban and Rural District Councils. The borrowing powers

conferred by this Act are similar to those contained in the Public Health Act 1875, but by the 1903 Act the debt is not to be reckoned as part of the debt of the Local Authority for the purpose of the limitation under the Public Health Act by which the debt is restricted to two years assessable value. By the same Act the maximum period of the loans was increased from sixty years to eighty years.

VI. *Local Government Act, 1894.*—This Act applied the borrowing powers of the Public Health Act, 1875, to Urban and Rural District Councils. The Act also applies to Parish Councils and Parish Meetings, who, with the consent of the County Council *and* the Local Government Board, may borrow for any permanent work or other thing, the cost of which, in the opinion of the Local Government Board, ought to be spread over a term of years. The money is to be borrowed on the security of the Poor Rate and the limit of the debt is one-half of the assessable value. In other respects the borrowing powers of the Public Health Act, 1875, apply.

Under this Act a County Council may lend money to a Parish Council and may raise loans for this purpose without the consent of the Local Government Board and irrespective of any limit of borrowing. Such loan must be repaid by the County Council within one year from the date when the advance is repaid by the Parish Council.

VII. *Education Act, 1902.*—This Act applies to county councils and to such borough councils and urban district councils as are "Education Authorities" under the Act. By Section 19 of the Act a council may borrow for the purposes of the Elementary Education Acts, 1870–1902, in the case of a county council as for the purposes of the Local Government Act, 1888, and in the case of a borough or urban district council as for the purposes of the Public Health Act, 1875. The debt incurred under the Education Acts is not to be reckoned as part of the total debt of these authorities for the purpose of the statutory limitations of borrowing under the Local Government Act, 1888, and the Public Health Act, 1875.

It will be remembered that the maximum period for the repayment of loans under the Local Government Act, 1888 is 30 years, and under the Public Health Act 1875, 60 years. By the Education (Administrative Provisions) Act, 1907, the term of 60 years is substituted for 30 years in the case of County Councils borrowing for educational purposes.

VIII. *Tramway Act, 1870.*—This applies to Borough Councils, Urban District Councils, and Parish Councils. The sanction of the Board of Trade is required for a loan under this Act. The maximum period is 30 years, and the repayment is to be made by equal annual instalments or by means of a sinking fund.

IX. *Lunacy Act, 1890.*—This Act applies to County Councils and County Boroughs, and to some of the Municipal Boroughs. The borrowing powers given in the Act are those of the Local Government Act 1888, in the case of County Councils, and the Municipal Corporations Act 1882, in the other cases.

X. *Electric Lighting Acts.*—The Board of Trade may by provisional order authorise certain of the local authorities to supply electricity for any public or private purpose. These authorities are the City of London, London County Council, Metropolitan Boroughs, Urban Sanitary Authorities, and Rural Sanitary Authorities. The provisions of the Public Health Act, 1875, are applied to regulate the borrowing and repayment of loans for the purposes of the Act of the last two mentioned authorities.

The following table, giving the authorities whose sanction must be obtained before Local Authorities in London can borrow, may be useful:—

Borrowing Authority.	Sanctioning Authority.
Metropolitan Borough Councils.	
For Baths, Washhouses, Public Libraries, Sanitary Conveniences and certain other purposes under the Public Health Act	Local Government Board.
For Cemeteries	Treasury.
For all other services	London County Council.
Poor Law Authorities	Local Government Board.
London County Council... ..	Parliament and Treasury.
Metropolitan Asylums Board	Local Government Board.
Receiver for Metropolitan Police) District... ..	Home Office.
Metropolitan Water Board	Local Government Board.
Central (Unemployed) Body	Local Government Board.

The next question in the proposal form deals with the important subject "Rates and Rateable Value." I must, in the first place, point out a fundamental difference between taxes and rates. When a tax is imposed it is impossible to foretell the total amount which will thereby be produced, whereas when the Rating Authorities make the rate (*i.e.* settle how much in the pound the rate is to be) they know beforehand how much is required and within a very small amount they know how much each penny of the rate will produce.

I should like also to point out the distinction between rateable value and assessable value. Rateable value is the gross annual value less the statutory deductions for repairs, insurance, etc., under the Parochial Assessment Act, 1836. Assessable value is defined by the Agricultural Rates Act, 1896, as the rateable value of the area reduced by an amount equal to one-half of the value of the agricultural land in the area. It is in this sense that the words are used in the Local Taxation Returns. In the Public Health Act, 1875, however, assessable value means the rateable value modified by the statutory exemptions allowed under that Act.

The existing scheme of rating originated with the Poor Rate. The rate was at its inception a voluntary one, the first compulsory assessment dating from 1555. This statute provides "That if any wilful or froward man shall obstinately refuse to give weekly to the relief of the poor, according to his ability, the bishop shall have authority to summon him before the sessions, when the Justices are to charitably and gently persuade and move the said obstinate person to extend his charity towards the relief of the poor, and if he will not be persuaded they may tax, sesse and limit what sum the said obstinate person shall pay."

The main act relating to poor relief was the Statute of 1597, which with a few verbal alterations was re-enacted in 1601, and our present system of rating has been founded on this old act. The Statute of 1601 (43 Eliz., c.2) enacts that the churchwardens and four substantial householders shall be nominated yearly by the Justices of the Peace, and shall be called overseers of the poor, and they shall raise the money necessary for the relief of the poor by "taxation of every inhabitant, parson, vicar, and other and every occupier of

“lands, houses, coal mines, and saleable underwoods according to the ability of the said parish.”

It is important to notice that both in this Act and the previous Act the poor rate was a personal tax, and was to be levied according to the *ability* of the taxpayer, and further that personal property as well as real was subject to the tax.

Owing to the inherent difficulties of rating personalty, it has almost invariably escaped taxation for local purposes. By the Poor Law Exemption Act, 1840, it was expressly exempted by statute from being so rated.

The existing method of rating was fixed by the Parochial Assessment Act, 1836. By this Statute the standard of value was to be determined as an estimate of the net annual value of the several hereditaments—“that is to say of the rent at which the same might be reasonably expected to let from year to year free of all the usual tenants’ taxes and rates and tithe commutation charge, if any, and deducting therefrom the probable average annual cost of the repairs, insurance, and other expenses, if any, necessary to maintain them in a state to command such rent.”

At the present time there is a large number of different rates and, as possibly most of you know, the rate which is referred to as the Poor Rate and which is collected by the Overseers of the Poor, includes a number of distinct rates. For example, in my own district the Poor Rate for the half-year is 2s. 2d. in the £1, and is made up of—

Relief of the Poor and other expenses of	s.	d.
Guardians	0	5
County Contributions	0	6½
Expenses of County Council under Education Act, 1902	0	4½
Police Rate	0	3½
General Expenses of District Council (including Highways)	0	5
Other expenses of the Overseers	0	1½
Total	2	2

The various rates which are levied by the different authorities are—

The Rate for the Relief of the Poor.—This is levied by the Guardians of the Poor on the rateable value. It varies

very considerably, being generally much lower in the rural areas than in the urban areas. By the Agricultural Rates Act 1896, the occupier of agricultural land is only assessed at one-half of the rateable value of the land, but the deficiency which thereby arises is practically recouped to the Spending Authorities out of the Consolidated Fund.

Parish Rate.—The expenses of a Parish Council and of a Parish Meeting are defrayed out of the Poor Rate. The expenses of the Council must not exceed an amount equal to a rate of 3*d.* in the £. If, however, the consent of the Parish Meeting is obtained, an amount equal to a 6*d.* rate may be expended. The expenses incurred under the “Adoptive Acts” are outside this limit.

The General District Rate.—This is levied by Boroughs and Urban District Councils, and is the rate out of which the expenses under the Public Health Acts are defrayed. The Public Health Act 1875, provides that agricultural land, railways, canals and tithes shall be exempt from contributing to the expenses incurred under the Act to the extent of three-fourths of the rateable value as fixed for the Poor Rate. The rate is levied over the whole of the district, under the jurisdiction of the Council, who collect it themselves.

General Expenses Rate.—This is levied by the Rural District Council and is for expenses other than those incurred for Public Health Act purposes. It is raised on the Poor Rate assessment; the exemptions allowed in the case of the Urban District and Borough “General District Rate” do not apply in this case. By the Agricultural Rates Act 1896, however, agricultural land is exempt to the extent of one-half of the rateable value.

The Special Expenses Rate.—This is raised by the Rural District Council, and is equivalent in nearly all respects to the General District Rate, and carries the same exemptions. It is, however, only levied on the portions of the district benefiting by the special expense.

The Borough Rate.—This is raised in boroughs, and is levied on the same basis as the Poor Rate, with which it is collected. The exemptions of the Agricultural Rates Act apply, but not those of the Public Health Act.

Private Improvement Rate is raised by Urban and Rural District Councils and Boroughs. It is charged on special areas only. A common example of this rate is found where

a roadway is improperly made and is put in order by the Local Authority, a Private Improvement Rate being levied on the owners to cover the cost.

County Rate.—The expenses of a County Council may be general or special. The general County Rate is raised to meet general expenses, and is levied on the whole area under its jurisdiction. The special County Rate is levied on the special area which benefits by the expenses for which the rate is levied. Special County Rates are raised for Police, Education, Lunatic Asylums, &c. In both the general and the special rate the assessment is that of the Poor Rate with the exemptions of the Agricultural Rates Act.

Education Rate.—This is raised by Education Authorities (*i.e.*, the County Council, Borough Council, or Urban District Council) on the basis of the Poor Rate. The exemptions of the Agricultural Rates Act apply to this rate. For Higher Education the rate which may be levied is limited to 1*d.* in the £ if the authority raising the rate is a Borough or Urban District Council, and to 2*d.* in the £, or such higher amount as shall be sanctioned by the Local Government Board, in the case of a County Council. There is no limit to the rate which a County Borough may levy for the purposes of Higher Education.

Watch Rate.—This is raised only by such boroughs as were empowered to do so in 1882, and is used to defray the expenses incurred by the police force of the borough. It is levied on a special valuation based on the net annual worth of the premises to a tenant on repairing lease, and is limited to 8*d.* in the £. In connection with this rate it may be mentioned that the Metropolitan Police Rate is limited to 5*d.* in the £ for the maintenance of the force.

Public Libraries Rate.—This rate is raised by those Authorities adopting the Public Libraries Act and is limited to 1*d.* in the £, the valuation basis being that of the poor rate. The exemptions are rather curious. In a borough the expenses are met out of the borough rate, agricultural land being exempt to the extent of one-half of the rateable value. In an urban district the expenses are met out of the rate applicable to sanitary expenses; agricultural land, railways, canals and tithes are exempted to the extent of three-quarters of the rateable value. In a parish the expenses

are met out of a rate from which agricultural land is exempted to the extent of two-thirds of the rateable value.

Baths and Washhouses—Burial Acts.—The expenses for these are met in a borough out of the borough rate, in other urban districts out of the general district rate, and in parishes out of the poor rate, with the exemptions applicable to these particular rates.

There are several other rates, but the above are those to be generally met with in practice.

Mention must be made of the machinery for the Centralisation of Local Expenditure in London. This consists of three parts.

- (a) *The Common Poor Fund*, which operates as follows :—The Local Government Board credits each union with Government grants in respect to its expenditure on certain services, and debits it with its rateable proportion of the total expenditure. A balance is struck, and the Board levies a net charge or makes a net grant as the case may be. The effect of this arrangement is to increase the rates in some districts and decrease them in others. Thus, in the City of London Union the rates were increased by 7·39*d.*, and decreased in St. George's-in-the-East by 23·14*d.* (These figures relate to the year 1906-7.)
- (b) *County Grants.*—These consist partly of Treasury subventions and partly of a direct county rate. The grants are given in respect of certain specified services. The effect on the rates is small in most cases, the maximum decrease in 1906-7 being 8·51*d.* in St. George's-in-the-East.
- (c) *Equalisation Fund.*—In each half year the London County Council forms a fund equal to a 3*d.* rate on the assessable value of London. The rate is raised from each parish in proportion to its assessable value. The fund thus formed is distributed among the parishes in proportion to the populations. The parishes most affected by the scheme were the City of London, whose rates were increased by 5·73*d.*, and Bethnal Green, whose rates were decreased by 7·16*d.*

The following table gives examples of the effect of the centralisation machinery :

City, Borough or Parish.	Rate required if centralisation machinery were non-existent.	Rate actually levied.	Difference.
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
City of London	5 1·47	6 2·5	+1 1·03
St. James (Westminster)	5 10·02	6 3	+0 4·98
St. George's-in-the-East	12 9·13	8 10	-3 11·13
Bethnal Green	11 1·01	8 0	-3 1·01

Closely akin to the subject of rates is another source of revenue by which Local Authorities benefit, viz., Treasury Subventions.

These are grants in aid made by the Imperial Government in order to assist the Local rates. They were initiated in 1835, and have been increased, as further duties have been placed on the local authorities. The increased grants, however, have not counterbalanced the increased expenses. The first grant was made in 1835 in aid of the police, and of the cost of criminal prosecutions. Various other grants were made, and in 1868 the total amount of Subvention paid was £1,500,000, which was equivalent on the Poor Rate Assessment to a rate of 3·4*d.* in the £.

In 1872 the School Board grant was first given.

In 1873-4 further grants were given in aid of School Boards and of the Salaries of Medical Officers of Health and Inspectors in Sanitary Districts.

In 1875 a new grant of 4*s.* a week for each pauper lunatic was made, and the Police Grant was doubled. A further grant was also made to Guardians for the cost of Registrars of Births and Deaths. In 1877 all prisons, which up to that date had been vested in Local Authorities, were transferred to the State.

In 1882 a new grant was made in respect to main and "disturnpiked" roads, and this was increased in 1887.

In 1887-8, the total Parliamentary Subvention had risen to £6,870,000, of which £4,132,000 was by direct grant, and £2,738,000 was by taking over services.

In 1888, a new system was introduced. The previous system had been to make grants in aid from the general revenue. In that year the system was adopted of assigning certain branches of the revenue to the local authorities. Two branches of revenue, viz.: (a) the Excise Licenses, thereafter to be called the Local Taxation Licenses; these were

to be paid into an account at the Bank of England, to be called the Local Taxation Account, and were not to pass through the Excise Account; (b) and 40 per-cent. of the Probate Duty, were diverted from the Exchequer and assigned to the County Councils. The Probate Duty was abolished in 1894, and a corresponding sum out of the Estate Duty derived from personalty was substituted. In 1890 certain surtaxes on Beer and Spirits were assigned to the County Councils and County Boroughs.

By the Agricultural Rates Act, 1896, occupiers of agricultural land were exempted from one-half of their rates, the deficiency being practically made up by the Government. In 1902 large grants were made on account of Elementary Education.

These grants are divided as follows:—

The Local Taxation Licenses are assigned to the Counties in which they are collected. The Death Duty Grant, and the Beer and Spirit Surtaxes are apportioned to the Councils in proportion to the grants in aid made in 1887-8.

These Subventions, after £300,000 has been subtracted for Police Pensions, are carried to a separate account of the County Council called the Exchequer Contribution Account and applied in the following order:

- (1) In paying the costs incurred in respect to the Account.
- (2) In paying the grants already referred to.
- (3) In paying the salaries of the Union Officers.
- (4) In payment of the general county expenses.

By the Finance Act, 1907, the proceeds are now paid into the Exchequer, and an amount equal to the same is paid out of the Consolidated Fund into the Local Taxation Account. If the duties are altered the amount transferred to the Local Taxation Account is to be based on the amount that would have been transferred had the duties remained the same as those in force at the commencement of the Act. If any duties are raised but the proceeds of such duties are less than the average amount for the three years ending 31st March, 1907, the amount transferred is to be made equal to such average amount.

The collection of the duties on certain of the local taxation licenses—to deal in game, licenses for dogs, killing game, guns, carriages, armorial bearings, and male servants—was

transferred from the Inland Revenue to the Counties and County Boroughs by the Finance Act, 1908, and a sum of £40,000 was directed to be paid annually out of the Consolidated Fund to the Local Taxation Account, which sum is to be distributed amongst the Councils in proportion to the proceeds of the duties on such licenses collected in each year. The provisions of the Finance Act, 1907, do not apply to these licenses or to the proceeds thereof.

The other sources of revenue are the sums received from the various commercial undertakings, such as gas, water, tramways, etc., and various rents, fees and tolls. The following table, taken from the Local Taxation Returns, 1905-6, will show the various proportions each source bears to the total:—

Public Rates	£58,255,544	... 51·2 per cent.
Exchequer Grants (including Local Taxation Duties).	19,849,983	... 17·5 „
Gas, Water, Electric Lighting, Tramways and Light Railways	20,298,691	... 17·8 „
Other sources (<i>i.e.</i> , Harbour Dues, Baths, Cemeteries, Markets, &c.)	15,313,758	... 13·5 „
	<u>£113,717,976</u>	<u>100</u> per cent.

Calculated on the basis of the rateable value for Poor Rate purposes (*i.e.*, with the exemption of one-half for agricultural land), the total rates were equivalent to an average rate of 6s. 1·2*d.* in the £. Of this the expenditure of the Guardians amounted to a rate of 1s. 3·4*d.*, and the purposes of Elementary Education absorbed a rate of 1s. 0·4*d.*

The following are the average rates in 1905-6 for various Local Authorities:

County Boroughs—

(1) Poor Rates, Borough Rates, Watch Rates, Highway Rates, Burial Rates, and other Rates having the same incidence as Poor Rate	s. d.
	3 11·3
(2) General District and other Rates	3 3·1
	<u>7 2·4</u>

Urban Districts—

	<i>s.</i>	<i>d.</i>
(1) Poor Rates, Borough Rates, &c., and other Rates having same incidence as the Poor Rate	3	3·2
(1) General District and other Rates .	3	2·2
	<hr/>	<hr/>
	6	5·4

Rural Districts—

The average rates in the pound for expenses to which all rural areas are subject (*i.e.*, the Poor Rates), payable by occupiers of buildings and other hereditaments not being agricultural land, were as follows :

	<i>s.</i>	<i>d.</i>
For Expenses of County Councils . . .	1	6·5
For Expenses of Guardians	1	0·1
For General Expenses of Rural District Councils	1	0·8
For separate Expenses of Overseers and for Expenses of Parish Councils, Parish Meetings, &c.	0	2·3
	<hr/>	<hr/>
	3	9·7

In the case of the occupier of agricultural land one-half of the above amount would be payable.

The next question on the proposal asks for information as to the amount of existing charges on the proposed security, and the proportion of such amount owing on remunerative works.

It is usual in the preliminary enquiry to ascertain the amount owing on non-remunerative and remunerative works, and sometimes the non-remunerative debt is split up into Educational debt and other non-commercial debt. It is evident that an authority whose debt was mainly remunerative would be in a much better position than a body whose debt was mainly non-productive.

The last question refers to the priority or otherwise of the proposed loan. I have already referred to the fact that the Public Works Loan Commissioners claim priority for their

loans over all others, either created previously, or to be created in future. Whether this claim can be substantiated is open to question, since no occasion has arisen to bring it to the test of a Judicial decision. It is doubtful also whether mortgages on the Borough Fund and Rate under the Municipal Corporations Act, 1882, do not rank in order of creation, but here again the point has never been definitely settled.

There is no doubt, however, that loans under the authority of the Poor Law Acts, 1889-1897, have priority according to the date of creation, as do loans raised under the provisions of the Local Loans Act, 1875. Existing loans are sometimes given priority over subsequent loans raised under private Acts.

In the majority of cases the margin of security is quite sufficient, and the question of priority is, therefore, only of academic interest. In some cases, however, it may have a practical effect on the acceptance or refusal of loans, to extravagant local bodies.

The question may also arise in cases where the rateable value has gone down owing, perhaps, to the industry on which the district depended vanishing. In such a case the rates might rise to a prohibitive figure, with an attendant emigration of the population, and the security for the loan be seriously jeopardised. Such a case might occur in a mining district where the mines had been worked out. For this reason some companies refuse to grant loans where the districts are mainly dependent on one industry.

In conclusion, I must point out that the information contained in this lecture is merely intended to enable students to gain a general idea of the subject. There are innumerable questions constantly arising which must of necessity be referred to Solicitors, and, moreover, owing to the constant alterations which are effected every year, it is quite possible that within a very short time many of the statements I have made will need revision.



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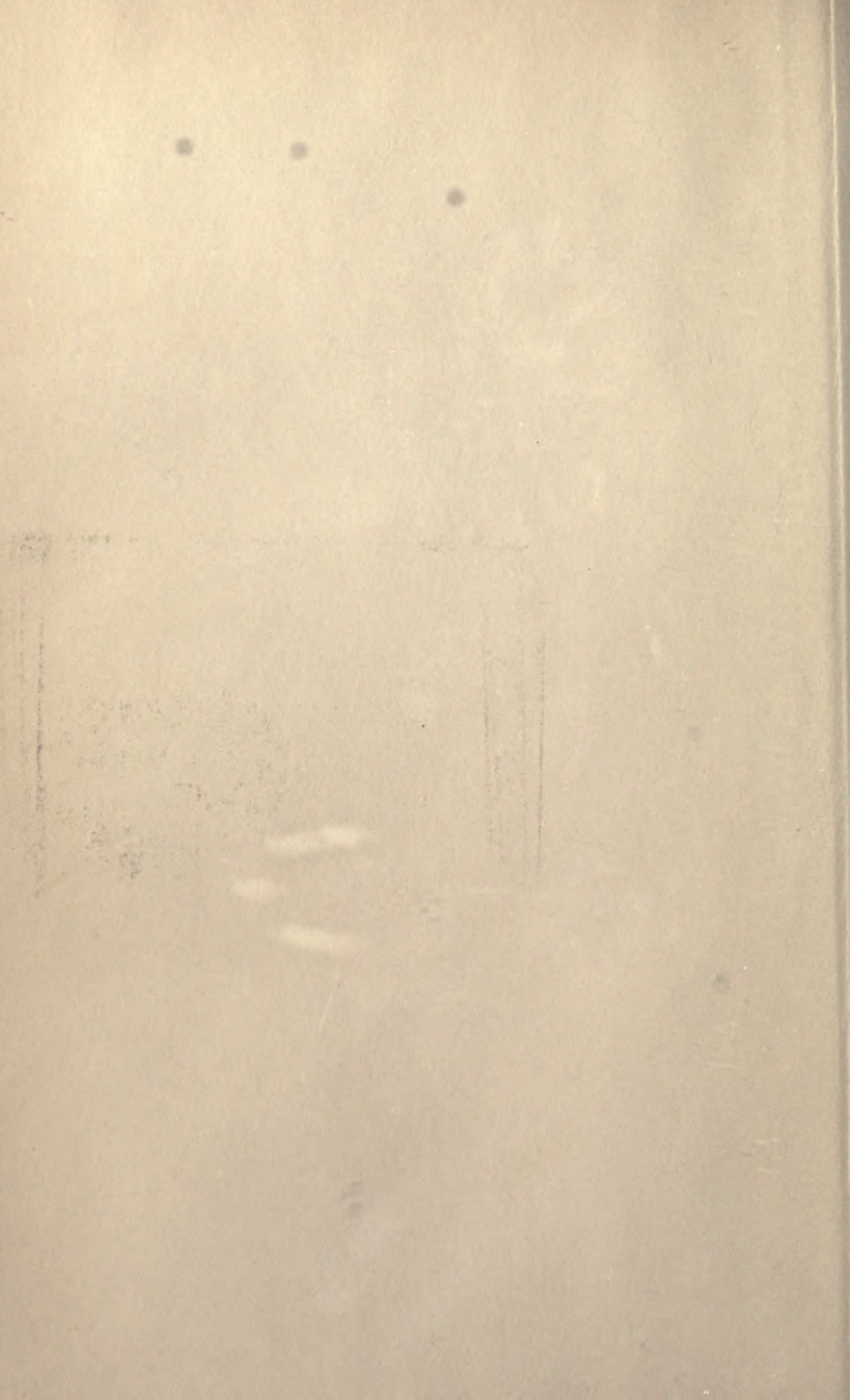
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